

Layout Verification and Archive Signoff

Objective: Completing this signoff determines the readiness of a design for mask procurement and archive. This form should be completed after final verification has been run..

Part Number (i.e. 773) 9887A	Die Revision (i.e. B) —	Wafer Fab Process Flow (i.e. ABCMOS) L40 DPTM
All Layer Revision: <input checked="" type="checkbox"/>	†Partial Layer Revision: <input type="checkbox"/>	
Cadlib Process: L40 DPTM	Cadlib Version: 20	

[†]Note: Partial layer revisions require an XOR job to verify that no other layers were modified.

1.0 List Instance Masters Run

Run Date: **5-14-02**

2.0 Design Rule Check

Run Date: **5-14-02**

Final DRC after layers have been generated and placed.

Self-intersecting, Discarded and Off-Grid errors are reported in the <jobname>.err file.

Self-Intersecting and Discarded geometries CANNOT be signed off. They must be fixed.

2.1 Non-45, Off grid or Acute angle geometries? **AESD-SMALL-SR** Y N n/a Comment/Action: **ESD cells, AESD-SMALL-SR-A, ESDOUT, ESD-POWER-NDIO, AESD-NSR, ESD, ESD-A**

2.2 Run "listdrc" on the <jobname>.sum file and include the printout. Y N n/a Were there any violation?; If YES, have the appropriate people sign off.
Design Engineer: _____
Process Engineer: _____
CAD Engineer: **J. K. Neel 5/14/02**
Comment/Action: **ITSMC Parts PPSFT35 and NPSFT35**

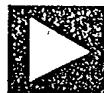
2.3 Were the command files MODIFIED? Y N n/a If modified, have appropriate people sign off:
Design Engineer: _____
CAD Engineer: _____
Comment/Action: _____

3.0 Layout versus Schematic

Run Date: **5-14-02**

Final check run after layers have been generated and placed.

3.1 Were there any CONNECTIVITY violations? Y N n/a If yes, include copy of .lvs file and get appropriate sign off:
Comment/Action: _____



3.2 Were there any SIZE violations?
If yes, include copy of .lvs file and get appropriate sign off:
Design Engineer: _____
CAD Engineer: _____
Comment/Action: _____

3.3 Has NETLIST been MODIFIED?
If modified, have appropriate people sign off:
Design Engineer: _____
CAD Engineer: _____
Comment/Action: _____

4.0 XOR - required on partial revisions. Run Date: _____

4.1 Was XOR run on old and new gin files?
Run "listdrc" on the <jobname>.sum file and include printout.

5.0 Assembly Check

5.1 Were the guidelines contained in ADI-0017 (Assembly Design Rules) followed during design and layout?
Note: If the answer is no, please contact Assembly Engineering to arrange a design review.
Comment/Action: _____

5.2 Was ADI Bond used to optimize bond pad placement?
Comment/Action: _____

6.0 Archive Prep

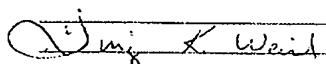
6.1 Was archive tar file created?
Y [] N [] n/a []

Design/Layout is responsible for creating a compressed tar file of the design database for archiving. The tar file should include:

- All Cadence libraries referenced by the design (Excluding CADLIB supplied process libraries and standard cell libraries)
- All TC schematics used for simulation and verification.
- Verilog/Synopsis files.
- Verification directories, these are normally located in your project directory.

There is a skill routine "Create Archive Script" available to help create an archive tar file. The skill routine will write a unix script that will create a compressed tar file when run by the user.

7.0 Signature Approval

Assembly Engineer: _____ Date: _____
Layout Engineer: _____ Date: _____
Design Engineer: _____ Date: _____
Design Manager: _____ Date: _____
CAD Engineer:  Date: 5/14/02

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CODE IDENT NO.

24355

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Foundry Mask Engineering

[Product Definition](#)[Die Finish](#)[Mask Procurement](#)[QA](#)[Database - Database Detail & Status](#)[Stepping Pitch](#)[Review & Submit](#)

Foundry: TSMC

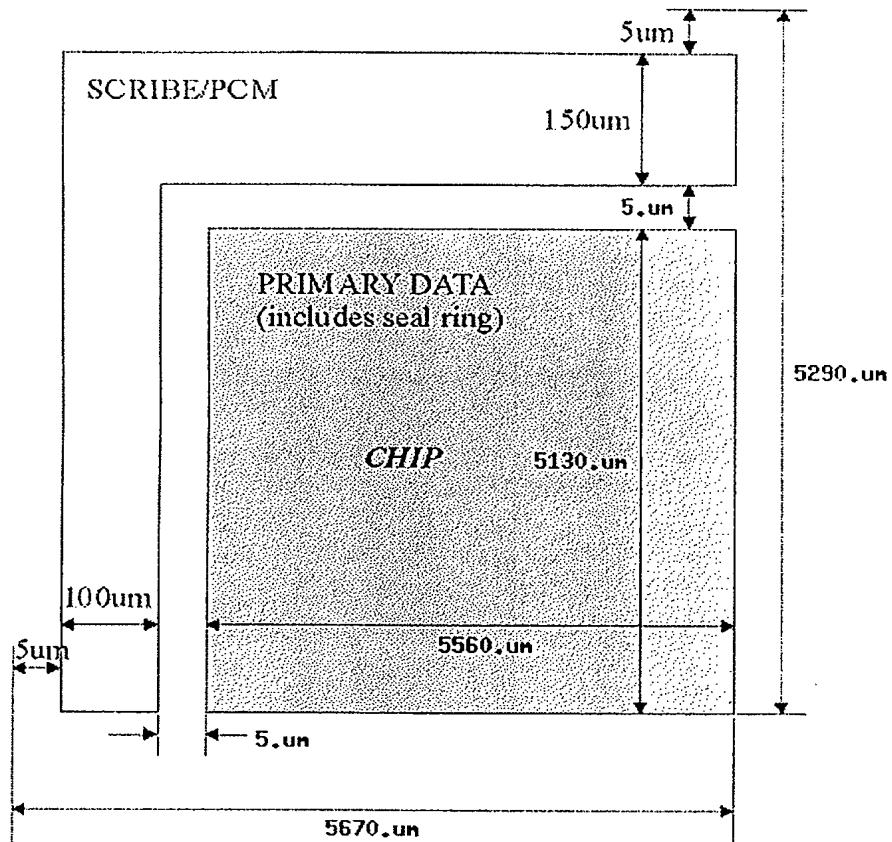
ECN	Device Name	Manufacturing
Date: 04/30/2002	Foundry: TMG285	Process: 0.35C2P3M33.00
Originator: Sandra Ireland	Rev: A ADI: AD9887A	FAB: FABWT(Wafertech)
Number: TOD 1378	Rev: -	

Please review the following information. If you need to make modifications use the "Back" button to return to the previous page. Otherwise, press the "Complete Die Finish" button located at the bottom of the screen.

Database	CADLIB or the Techfile path/name:	L40DPTM
	Primary Cell Name:	9887a
	Primary Cell Coord. (um):	XLL = -2780 YLL = -2565 XUR = 2780 YUR = 2565
	Scribe:	110/160 80x80

DRC Status:	Violations With CAD Sign-off
Are you using 3rd party IP/Libraries on this product?	No
Is the metal and poly density satisfied?	Yes
Are metal fuses being used?	No
Seal-Ring Status:	Seal-Ring Complete Complete-ADI Seal-Ring: (Spec/Rev:) L40DPTM
Mask Procurement Engineer:	Mohamed Mohamedi
Comments	

Chip Size (with Seal Ring)	Stepping Pitch		
X(um):	5560.	X(um):	5670.
Y(um):	5130.	Y(um):	5290.



[Go Back](#) [Submit Die Finish](#) [Save and Quit](#) [Return ECN](#)

Projects/ad9887A/vanhoy/autoroute
HDCP_TMS18 used in the 9887A

Projects/ad 9887A/screed/Auto route
eco3 control/Logic Top used in the 9887A

Notes

Autorange notes craftsman

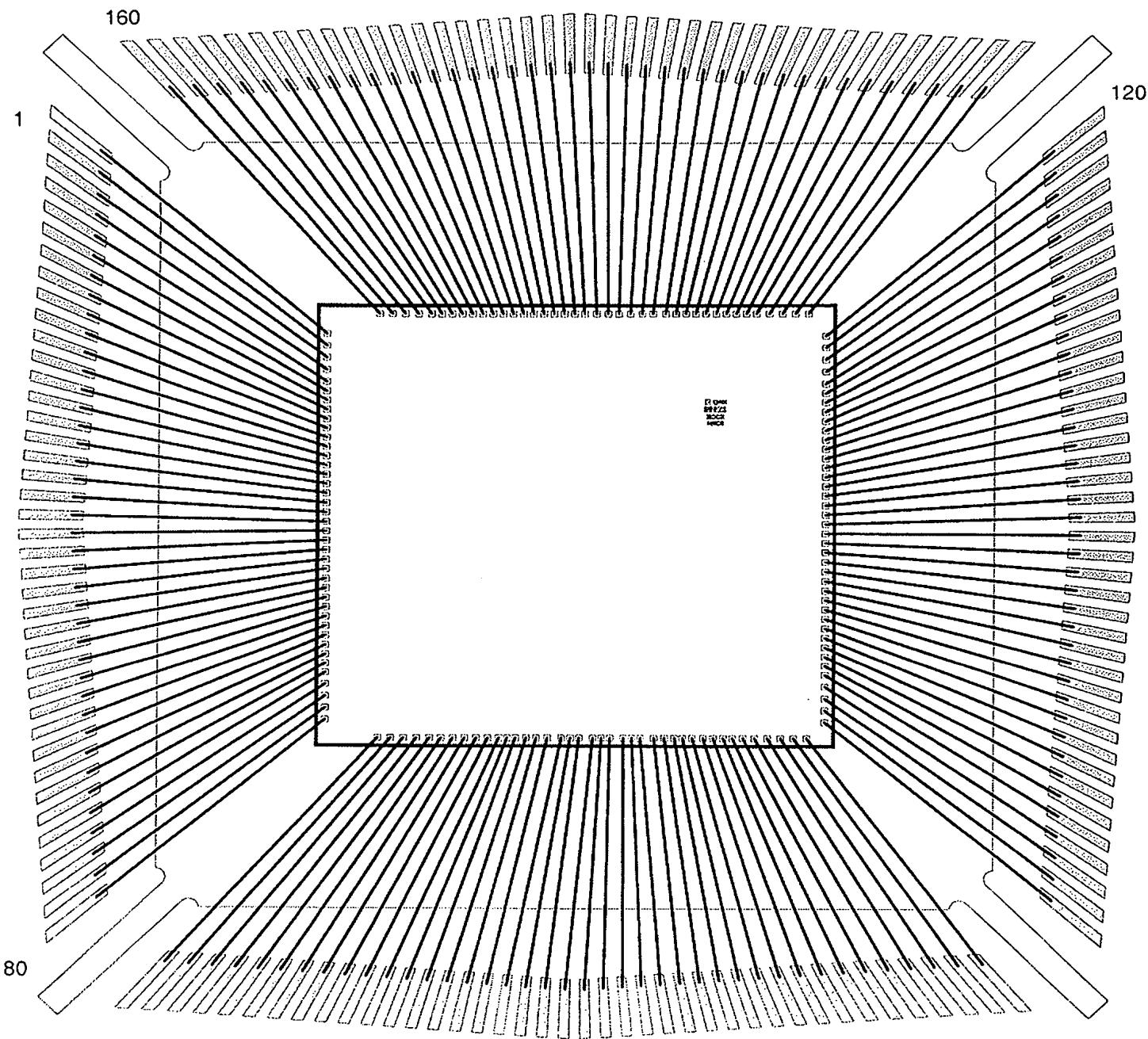
Projects/ad9887A/Vanhoy

140-dptm-44. rules
9887.do

Assembly Location: STATS

160L MQFP 28x28

"NULL"



All information in this diagram is proprietary to ANALOG DEVICES INC.
and is subject to non-disclosure agreements.

ADIBOND Ver: 5.1

Ring Diagram #	Die ID	Product	Pin to bond first	Scale	CODE IDENT NO.	Bond Pad Metal Composition
	AD9887A	AD9887A	Pin 1	15x	24355	98.5%Al, 1%Si, 0.5%Cu
ANALOG DEVICES	Revision Number	Min. Passivation Opening 70 x 70 μ m 2.8 x 2.8 mils	Die Size 5640 x 5210 μ m 222.0 x 205.1 mils	Paddle Size 9000 x 9000 μ m 354 x 354 mils	Foundry Number PKG000701	

Assembly Location: STATS

160L MQFP 28x28

"NULL"

BOND WIRE STATISTICS
=====

Product (Generic) Number(s): AD9887A

Die ID: AD9887A

Package ID: 160MQFP701

Wire Type: Gold

Package Capability: SBGA, PBGA, LQFP, MQFP

Wire Diameter: 30(1.18)

Max Allowed Wire Length: 4570(179.92)

Longest Wire: 3479(137.0)

Shortest Wire: 2707(106.6)

* ADI-0017 violations are listed.

Measurements take the form: microns (mils).

BOND PAD STATISTICS
=====

All measurements in microns.

Min. Passivation Opening: 70x70

Min Pad Pitch: 90

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	AD9887A	AD9887A	Pin 1	15x	24355	98.5%Al, 1%Si, 0.5%Cu

Revision Number	Min. Passivation Opening	Die Size	Paddle Size	Foundry Number
	70 x 70 μ m 2.8 x 2.8 mils	5640 x 5210 μ m 222.0 x 205.1 mils	9000 x 9000 μ m 354 x 354 mils	PKG000701



Assembly Location: STATS

160L MQFP 28x28

"NULL"

Products Covered by this Document: AD9887A

COORDINATES OF BOND PAD CENTERS
=====

1	-2705,2255	2	-2705,2115	3	-2705,1975	4	-2705,1835
5	-2705,1695	6	-2705,1585	7	-2705,1475	8	-2705,1365
9	-2705,1255	10	-2705,1145	11	-2705,1035	12	-2705,925
13	-2705,815	14	-2705,705	15	-2705,595	16	-2705,485
17	-2705,375	18	-2705,265	19	-2705,155	20	-2705,45
21	-2705,-65	22	-2705,-175	23	-2705,-285	24	-2705,-395
25	-2705,-505	26	-2705,-615	27	-2705,-725	28	-2705,-835
29	-2705,-945	30	-2705,-1055	31	-2705,-1165	32	-2705,-1275
33	-2705,-1385	34	-2705,-1495	35	-2705,-1605	36	-2705,-1715
37	-2705,-1855	38	-2705,-1995	39	-2705,-2135	40	-2705,-2275
41	-2145,-2490	42	-2005,-2490	43	-1865,-2490	44	-1725,-2490
45	-1585,-2490	46	-1460,-2490	47	-1335,-2490	48	-1210,-2490
49	-1085,-2490	50	-960,-2490	51	-840,-2490	52	-750,-2490
53	-660,-2490	54	-545,-2490	55	-435,-2490	56	-315,-2490
57	-165,-2490	58	-70,-2490	59	25,-2490	60	175,-2490
61	270,-2490	62	365,-2490	63	515,-2490	64	610,-2490
65	705,-2490	66	855,-2490	67	970,-2490	68	1080,-2490
69	1170,-2490	70	1275,-2490	71	1395,-2490	72	1505,-2490
73	1615,-2490	74	1715,-2490	75	1830,-2490	76	1955,-2490
77	2095,-2490	78	2235,-2490	79	2375,-2490	80	2515,-2490
81	2705,-2300	82	2705,-2160	83	2705,-2020	84	2705,-1880
85	2705,-1740	86	2705,-1630	87	2705,-1520	88	2705,-1410
89	2705,-1300	90	2705,-1190	91	2705,-1080	92	2705,-970
93	2705,-860	94	2705,-750	95	2705,-640	96	2705,-530
97	2705,-420	98	2705,-310	99	2705,-200	100	2705,-90
101	2705,20	102	2705,130	103	2705,240	104	2705,350
105	2705,460	106	2705,570	107	2705,680	108	2705,790
109	2705,900	110	2705,1010	111	2705,1120	112	2705,1230
113	2705,1340	114	2705,1450	115	2705,1560	116	2705,1670
117	2705,1810	118	2705,1950	119	2705,2090	120	2705,2230
121	2520,2490	122	2380,2490	123	2240,2490	124	2100,2490
125	1960,2490	126	1850,2490	127	1740,2490	128	1630,2490
129	1520,2490	130	1405,2490	131	1295,2490	132	1185,2490
133	1075,2490	134	965,2490	135	825,2490	136	705,2490
137	575,2490	138	445,2490	139	325,2490	140	195,2490
141	65,2490	142	-45,2490	143	-155,2490	144	-265,2490
145	-375,2490	146	-485,2490	147	-595,2490	148	-705,2490
149	-815,2490	150	-925,2490	151	-1035,2490	152	-1145,2490
153	-1255,2490	154	-1365,2490	155	-1475,2490	156	-1585,2490
157	-1725,2490	158	-1865,2490	159	-2005,2490	160	-2145,2490

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Revision Number	Min. Passivation Opening	Die Size	Paddle Size	Foundry Number
	70 x 70µm 2.8 x 2.8 mils	5640 x 5210µm 222.0 x 205.1 mils	9000 x 9000µm 354 x 354 mils	PKG000701



```
(gremlin) net/catwoman.adseng/disk1/ftp> cd inbox
(gremlin) net/catwoman.adseng/disk1/ftp/inbox> ls -l 9*
-rw-r--r-- 1 7204 19970312 May 14 13:18 9887a.gin
(gremlin) net/catwoman.adseng/disk1/ftp/inbox> !!
ls -l 9*
-rw-r--r-- 1 7204 46214560 May 14 13:21 9887a.gin
(gremlin) net/catwoman.adseng/disk1/ftp/inbox> !!
ls -l 9*
-rw-r--r-- 1 7204 62825016 May 14 13:23 9887a.gin
(gremlin) net/catwoman.adseng/disk1/ftp/inbox> !!
ls -l 9*
-rw-r--r-- 1 7204 70236424 May 14 13:23 9887a.gin
(gremlin) net/catwoman.adseng/disk1/ftp/inbox> !!
ls -l 9*
-rw-r--r-- 1 7204 70568808 May 14 13:24 9887a.gin
(gremlin) net/catwoman.adseng/disk1/ftp/inbox> !!
ls -l 9*
-rw-r--r-- 1 7204 74442752 May 14 13:24 9887a.gin
(gremlin) net/catwoman.adseng/disk1/ftp/inbox>
```

```
{gremir,, projects/ad9887A/vanhoy/drac1vs> ftp catwoman.adseng
Connected to catwoman.adseng.analog.com.
220 catwoman FTP server (SunOS 5.8) ready.
Name (catwoman.adseng:vanhoy): anonymous
331 Guest login ok, send ident as password.
Password:
230 Guest login ok, access restrictions apply.
ftp> cd inbox
250 CWD command successful.
ftp> binary
200 Type set to I.
ftp> put 9887a.gin
200 PORT command successful.
150 Binary data connection for 9887a.gin (137.71.50.129,60716).
226 Transfer complete.
local: 9887a.gin remote: 9887a.gin
7442752 bytes sent in 4.6e+02 seconds (157.66 Kbytes/s)
ftp>
```


1 *****
 ***** LVS DEVICE MATCH SUMMARY *****

 NUMBER OF UN-MATCHED SCHEMATICS DEVICES = 0
 NUMBER OF UN-MATCHED LAYOUT DEVICES = 349
 NUMBER OF MATCHED SCHEMATICS DEVICES = 136392
 NUMBER OF MATCHED LAYOUT DEVICES = 136392
 ***** DISCREPANCY POINTS LISTING *****

NO DISCREPANCIES

***** DEVICE MATCHING SUMMARY BY TYPE *****

 TYPE SUB-TYPE TOTAL DEVICE UN-MATCHED DEVICE
 SCH. LAY. SCH. LAY.
 MOS P 122678 122679 0 1
 MOS N 123205 123205 0 0
 BJT SP 168 168 0 0
 RES P 247 247 0 0
 RES M1 1 1 0 0
 RES N 403 403 0 0
 RES M3 6 6 0 0
 RES N3 9 9 0 0
 RES P1 12 12 0 0
 RES P2 4 4 0 0
 RES B1 24 24 0 0
 DIO ND 96 96 0 0
 CAP N 21 21 0 0
 CAP P4 32 32 0 0
 CAP PS 170 518 0 348
 ***** UN-MATCHED LAYOUT DEVICES *****
 ***** (LIST UP TO 100) *****

: ?DEV109742 MOS P Y=-475.68
 : X=1209.28 Y=5.00
 : ?94370, ?77582, ?77583
 : N = 23.55 I = 5.00
 : ?DEV105 CAP PS
 : X=-105.55 Y=-148.10
 : ?94737, ?94389

: ?DEV95 CAP PS X=-64.05 Y=-148.10
 : ?94738, ?94390
 : ?DEV6 CAP PS X=-62.55 Y=-148.10
 : ?94739, ?94391
 : ?DEV87 CAP PS X=-41.05 Y=-148.10
 : ?94740, ?94392
 : ?DEV07 CAP PS X=-105.55 Y=-133.40
 : ?94755, ?94397
 : ?DEV10 CAP PS X=-41.05 Y=-133.40
 : ?94756, ?94398
 : ?DEV15 CAP PS X=-105.55 Y=-118.70
 : ?94767, ?94399
 : ?DEV19 CAP PS X=-41.05 Y=-118.70
 : ?94780, ?94432
 : ?DEV45 CAP PS X=-105.55 Y=-104.00
 : ?94779, ?94431
 : ?DEV48 CAP PS X=-41.05 Y=-104.00
 : ?94780, ?94432
 : ?DEV64 CAP PS X=-105.55 Y=-89.30
 : ?94791, ?94443
 : ?DEV67 CAP PS X=-41.05 Y=-89.25
 : ?94792, ?94444
 : ?DEV95 CAP PS X=-105.55 Y=-74.60
 : ?94804, ?94456
 : ?DEV96 CAP PS X=-84.05 Y=-74.60
 : ?94805, ?94457
 : ?DEV197 CAP PS X=-62.55 Y=-74.60
 : ?94806, ?94458
 : ?DEV198 CAP PS X=-41.05 Y=-74.60
 : ?94807, ?94459
 : ?DEV278 CAP PS X=-105.60 Y=-614.65
 : ?94853, ?94405
 : ?DEV279 CAP PS X=-84.10 Y=-614.65
 : ?94854, ?94406
 : ?DEV280 CAP PS X=-62.60 Y=-614.65
 : ?94855, ?94407
 : ?DEV281 CAP PS X=-41.10 Y=-614.65
 : ?94856, ?94408
 : ?DEV301 CAP PS X=-105.60 Y=-629.35
 : ?94871, ?94523

```

: ?DEV304 CAP PS
: X=-41.10 Y=629.35
: ?94872, ?94224
: ?DEV320 CAP PS
: X=-105.60 Y=644.05
: ?9483, ?94335
: ?DEV323 CAP PS
: X=-41.10 Y=644.05
: ?9484, ?94336
: ?DEV339 CAP PS
: X=-105.60 Y=658.75
: ?9485, ?94347
: ?DEV342 CAP PS
: X=-41.10 Y=658.75
: ?9486, ?94348
: ?DEV358 CAP PS
: X=-105.60 Y=673.45
: ?94901, ?94559
: ?DEV361 CAP PS
: X=-41.10 Y=673.50
: ?94918, ?94560
: ?DEV389 CAP PS
: X=-105.60 Y=688.15
: ?94920, ?94572
: ?DEV390 CAP PS
: X=-41.10 Y=688.15
: ?94921, ?94573
: ?DEV391 CAP PS
: X=-63.60 Y=688.15
: ?94922, ?94574
: ?DEV392 CAP PS
: X=-41.10 Y=688.15
: ?94923, ?94575
: ?DEV453 CAP PS
: X=-103.33 Y=1382.80
: ?94929, ?94621
: ?DEV454 CAP PS
: X=-81.83 Y=1382.80
: ?94930, ?94622
: ?DEV455 CAP PS
: X=-60.33 Y=1382.80
: ?94931, ?94623
: ?DEV456 CAP PS
: X=-38.83 Y=1382.80
: ?94932, ?94624
: ?DEV476 CAP PS
: X=-103.33 Y=1397.50
: ?94939, ?94651
: ?DEV479 CAP PS
: X=-38.83 Y=1397.50
: ?94988, ?94640
: ?DEV495 CAP PS
: X=-103.33 Y=1412.20
: ?94939, ?94651
: ?DEV498 CAP PS
: X=-38.83 Y=1412.20
: ?95006, ?94652
: ?DEV514 CAP PS
: X=-103.33 Y=1426.90
: ?95011, ?94663

```

```

: ?DEV517 CAP PS
: X=-38.83 Y=1426.90
: ?95012, ?94664
: ?DEV533 CAP PS
: X=-103.33 Y=1441.60
: ?95033, ?94675
: ?DEV536 CAP PS
: X=-38.83 Y=1441.65
: ?95034, ?94676
: ?DEV564 CAP PS
: X=-103.33 Y=1456.30
: ?95036, ?94688
: ?95038, ?94690
: ?DEV565 CAP PS
: X=-81.83 Y=1456.30
: ?95039, ?94691
: ?DEV566 CAP PS
: X=-60.33 Y=1456.30
: ?94719, ?94371
: ?DEV567 CAP PS
: X=-38.83 Y=1456.30
: ?95037, ?94692
: ?DEV568 CAP PS
: X=-427.75 Y=-162.20
: ?94721, ?94373
: ?DEV63 CAP PS
: X=-406.35 Y=-162.30
: ?94720, ?94374
: ?DEV64 CAP PS
: X=-384.95 Y=-162.30
: ?94724, ?94375
: ?DEV65 CAP PS
: X=-405.35 Y=-162.30
: ?94725, ?94376
: ?DEV66 CAP PS
: X=-427.75 Y=-162.30
: ?94726, ?94377
: ?DEV67 CAP PS
: X=-384.95 Y=-162.30
: ?94728, ?94378
: ?DEV68 CAP PS
: X=-427.75 Y=-162.30
: ?94729, ?94379
: ?DEV69 CAP PS
: X=-384.95 Y=-162.30
: ?94730, ?94380
: ?DEV70 CAP PS
: X=-427.75 Y=-162.30
: ?94731, ?94381
: ?DEV71 CAP PS
: X=-384.95 Y=-162.30
: ?94732, ?94382
: ?DEV72 CAP PS
: X=-427.75 Y=-162.30
: ?94733, ?94383
: ?DEV73 CAP PS
: X=-384.95 Y=-162.30
: ?94734, ?94384
: ?DEV74 CAP PS
: X=-427.75 Y=-162.30
: ?94735, ?94385
: ?DEV75 CAP PS
: X=-384.95 Y=-162.30
: ?94736, ?94386
: ?DEV76 CAP PS
: X=-427.75 Y=-162.30
: ?94737, ?94387
: ?DEV77 CAP PS
: X=-384.95 Y=-162.30
: ?94738, ?94388
: ?DEV78 CAP PS
: X=-427.75 Y=-162.30
: ?94739, ?94389
: ?DEV79 CAP PS
: X=-384.95 Y=-162.30
: ?94740, ?94390
: ?DEV80 CAP PS
: X=-427.75 Y=-162.30
: ?94741, ?94391
: ?DEV81 CAP PS
: X=-384.95 Y=-162.30
: ?94742, ?94392
: ?DEV83 CAP PS
: X=-427.75 Y=-162.30
: ?94743, ?94393
: ?DEV84 CAP PS
: X=-384.95 Y=-162.30
: ?94744, ?94394
: ?DEV85 CAP PS
: X=-427.75 Y=-162.30
: ?94745, ?94395
: ?DEV86 CAP PS
: X=-384.95 Y=-162.30
: ?94746, ?94396
: ?DEV87 CAP PS
: X=-427.75 Y=-162.30
: ?94747, ?94397
: ?DEV88 CAP PS
: X=-384.95 Y=-162.30
: ?94748, ?94398
: ?DEV89 CAP PS
: X=-427.75 Y=-162.30
: ?94749, ?94399
: ?DEV90 CAP PS
: X=-384.95 Y=-162.30
: ?94750, ?94400
: ?DEV91 CAP PS
: X=-427.75 Y=-162.30
: ?94751, ?94401
: ?DEV92 CAP PS
: X=-384.95 Y=-162.30
: ?94752, ?94402
: ?DEV93 CAP PS
: X=-427.75 Y=-162.30
: ?94753, ?94403
: ?DEV94 CAP PS
: X=-384.95 Y=-162.30
: ?94754, ?94404
: ?DEV95 CAP PS
: X=-427.75 Y=-162.30
: ?94755, ?94405
: ?DEV96 CAP PS
: X=-384.95 Y=-162.30
: ?94756, ?94406
: ?DEV97 CAP PS
: X=-427.75 Y=-162.30
: ?94757, ?94407
: ?DEV98 CAP PS
: X=-384.95 Y=-162.30
: ?94758, ?94408
: ?DEV99 CAP PS
: X=-427.75 Y=-162.30
: ?94760, ?94409
: ?DEV100 CAP PS
: X=-384.95 Y=-162.30
: ?94761, ?94410
: ?DEV101 CAP PS
: X=-427.75 Y=-162.30
: ?94762, ?94411
: ?DEV102 CAP PS
: X=-384.95 Y=-162.30
: ?94763, ?94412
: ?DEV103 CAP PS
: X=-427.75 Y=-162.30
: ?94764, ?94413
: ?DEV104 CAP PS
: X=-384.95 Y=-162.30
: ?94765, ?94414
: ?DEV105 CAP PS
: X=-427.75 Y=-162.30
: ?94766, ?94415
: ?DEV106 CAP PS
: X=-384.95 Y=-162.30
: ?94767, ?94416
: ?DEV107 CAP PS
: X=-427.75 Y=-162.30
: ?94768, ?94417
: ?DEV108 CAP PS
: X=-384.95 Y=-162.30
: ?94769, ?94418
: ?DEV109 CAP PS
: X=-427.75 Y=-162.30
: ?94770, ?94419
: ?DEV110 CAP PS
: X=-384.95 Y=-162.30
: ?94771, ?94420
: ?DEV111 CAP PS
: X=-427.75 Y=-162.30
: ?94772, ?94421
: ?DEV112 CAP PS
: X=-384.95 Y=-162.30
: ?94773, ?94422
: ?DEV113 CAP PS
: X=-427.75 Y=-162.30
: ?94774, ?94423
: ?DEV114 CAP PS
: X=-384.95 Y=-162.30
: ?94775, ?94424
: ?DEV115 CAP PS
: X=-427.75 Y=-162.30
: ?94776, ?94425
: ?DEV116 CAP PS
: X=-384.95 Y=-162.30
: ?94777, ?94426
: ?DEV117 CAP PS
: X=-427.75 Y=-162.30
: ?94778, ?94427
: ?DEV118 CAP PS
: X=-384.95 Y=-162.30
: ?94779, ?94428
: ?DEV119 CAP PS
: X=-427.75 Y=-162.30
: ?94780, ?94429
: ?DEV120 CAP PS
: X=-384.95 Y=-162.30
: ?94781, ?94430
: ?DEV121 CAP PS
: X=-427.75 Y=-162.30
: ?94782, ?94431

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: ?DEV163 CAP PS
: X=-386.95 Y=-89.30
: ?94790, ?94442
: ?DEV192 CAP PS
: X=-427.75 Y=-74.60
: ?94801, ?94453
: ?DEV193 CAP PS
: X=-406.35 Y=-74.60
: ?94802, ?94454
: ?DEV194 CAP PS
: X=-384.95 Y=-74.60
: ?94803, ?94455
: ?DEV211 CAP PS
: X=-427.75 Y=-59.90
: ?94810, ?94472
: ?DEV212 CAP PS
: X=-406.35 Y=-59.90
: ?94821, ?94473
: ?DEV233 CAP PS
: X=-384.95 Y=-59.90
: ?94822, ?94474
: ?DEV256 CAP PS
: X=-427.80 Y=599.95
: ?94835, ?94487
: ?DEV257 CAP PS
: X=-406.40 Y=599.95
: ?94836, ?94488
: ?DEV258 CAP PS
: X=-385.00 Y=599.95
: ?94837, ?94489
: ?DEV275 CAP PS
: X=-427.80 Y=599.95
: ?94838, ?94502
: ?DEV276 CAP PS
: X=-406.40 Y=614.65
: ?94851, ?94503
: ?DEV277 CAP PS
: X=-385.00 Y=614.65
: ?94852, ?94504
: ?DEV278 CAP PS
: X=-427.80 Y=629.35
: ?94859, ?94521
: ?DEV300 CAP PS
: X=-385.00 Y=629.35
: ?94860, ?94522
: ?DEV317 CAP PS
: X=-427.80 Y=644.05
: ?94881, ?94533
: ?DEV319 CAP PS
: X=-385.00 Y=644.05
: ?94882, ?94534
: ?DEV336 CAP PS
: X=-427.80 Y=658.75
: ?94883, ?94545
: ?DEV338 CAP PS
: X=-385.00 Y=658.75
: ?94884, ?94546
: ?DEV355 CAP PS
: X=-427.80 Y=673.45
: ?94895, ?94557

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: ?DEV357 CAP PS
: X=-385.00 Y=673.45
: ?94906, ?94558
: ?DEV386 CAP PS
: X=-427.80 Y=688.15
: ?94917, ?94559
: ?DEV387 CAP PS
: X=-406.40 Y=688.15
: ?94918, ?94570
: ?DEV388 CAP PS
: X=-385.00 Y=688.15
: ?94919, ?94571
: ?DEV405 CAP PS
: X=-406.40 Y=702.95
: ?94937, ?94589
: ?DEV407 CAP PS
: X=-427.80 Y=702.95
: ?94938, ?94586
: ?DEV431 CAP PS
: X=-425.53 Y=1368.10
: ?94951, ?94603
: ?DEV432 CAP PS
: X=-386.73 Y=1368.10
: ?94953, ?94605
: ?DEV450 CAP PS
: X=-404.13 Y=1368.10
: ?94952, ?94604
: ?DEV453 CAP PS
: X=-382.73 Y=1368.10
: ?94954, ?94604
: ?DEV456 CAP PS
: X=-425.53 Y=1382.80
: ?94956, ?94618
: ?DEV457 CAP PS
: X=-404.13 Y=1382.80
: ?94957, ?94619
: ?DEV458 CAP PS
: X=-382.73 Y=1382.80
: ?94958, ?94620
: ?DEV473 CAP PS
: X=-425.53 Y=1397.50
: ?94965, ?94637
: ?DEV475 CAP PS
: X=-382.73 Y=1397.50
: ?94966, ?94638
: ?DEV492 CAP PS
: X=-425.53 Y=1412.20
: ?94971, ?94649
: ?DEV494 CAP PS
: X=-382.73 Y=1412.20
: ?94998, ?94650
: ?DEV511 CAP PS
: X=-425.53 Y=1426.90
: ?95009, ?94661

```

THE REST OF UN-MATCHED LAYOUT DEVICES ARE NOT LISTED

***** LVS SUMMARY (REPEATED) *****

***** LVS DEVICE MATCH SUMMARY *****

NUMBER OF UN-MATCHED SCHEMATICS	DEVICES	=	0
NUMBER OF UN-MATCHED LAYOUT	DEVICES	=	349
NUMBER OF MATCHED SCHEMATICS	DEVICES	=	136392
NUMBER OF MATCHED LAYOUT	DEVICES	=	136392

***** DEVICE MATCHING SUMMARY BY TYPE *****

TYPE	SUB-TYPE	TOTAL DEVICE	UN-MATCHED DEVICE
		SCH.	LAY.
MOS	P	122678	122679
MOS	N	123205	123205
BJT	SP	168	168
RES	P	247	247
RES	M1	1	1
RES	N	403	403
RES	M3	6	6
RES	NW	9	9
RES	P1	12	12
RES	P2	4	4
RES	B7	24	24
DIO	ND	96	96
CAP	N	21	21
CAP	PW	32	32
CAP	PS	170	518
		0	0
			348

***** /W* -- SCHEMATIC AND LAYOUT MAY NOT MATCH
 ** CHECK ALL ABOVE DISCREPANCY
 ** AND WARNING MESSAGES

/N DRACULA (REV. 4.7.03-2000 / SUN-4 SSR4 /GENDATE: 29-FEB/2000)
*** (Copyright 1995, Cadence) ***
/N EXEC TIME = 12:00:16 DATE = 14-ICAV-2002 HOSTNAME = xkc

----- ALL ERROR CELLS LISTING -----

X887apnchkp.sum

X887apnchkfp.sum

Exhibit 5
Serial No. 10/717,394
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Exhibit 5
Serial No. 10/717,394
page 18 of 46

```
CELL NSDIW61 DELETED BECAUSE OF NO OUTPUT DATA
CELL NSDIS11 DELETED BECAUSE OF NO OUTPUT DATA
CELL NSGSA61 DELETED BECAUSE OF NO OUTPUT DATA
CELL NPIQ61 DELETED BECAUSE OF NO OUTPUT DATA
CELL NPIQ62 DELETED BECAUSE OF NO OUTPUT DATA
```

WIND30 : -1754.30 -2029.80 1830.70 1513.65
ENDS AT TIME =12:00:14 DATE =14-MAY-2002

1 PROBLEM GEOMETRY ERROR LISTING

PROBLEM GEOMETRY ERROR LISTING

TING 11

CELL: ESD.A	LAYER: 8	PROGEO.ACUTE
95.250	222.000	93.750
81.050	198.500	79.550
75.150	198.500	75.150
79.550	208.500	81.050
74.550	223.500	74.550
70.150	170.400	68.650
70.150	181.900	73.050
74.550	223.500	70.150
68.650	254.600	54.400
52.450	163.000	95.250
		163.000
		95.250

CELL: AESS_SMALL_SR_A LAYER: 8 PRO/GEO:ROUTE
97.800 96.600 213.550 83.900
212.350

- 22 -

CELL N3D661 DELETED BECAUSE OF NO OUTPUT DATA
CELL GA3VNE61 DELETED BECAUSE OF NO OUTPUT DATA
CELL N3IP61 DELETED BECAUSE OF NO OUTPUT DATA
CELL N3PMM61 DELETED BECAUSE OF NO OUTPUT DATA
CELL ERR261 DELETED BECAUSE OF NO OUTPUT DATA
CELL NSD5W61 DELETED BECAUSE OF NO OUTPUT DATA
CELL NSD5S61 DELETED BECAUSE OF NO OUTPUT DATA
CELL N5D661 DELETED BECAUSE OF NO OUTPUT DATA
CELL O2N561 DELETED BECAUSE OF NO OUTPUT DATA
CELL N5P661 DELETED BECAUSE OF NO OUTPUT DATA
CELL N5PM61 DELETED BECAUSE OF NO OUTPUT DATA
CELL ERR361 DELETED BECAUSE OF NO OUTPUT DATA
CELL PNEU61 DELETED BECAUSE OF NO OUTPUT DATA
CELL PWES61 DELETED BECAUSE OF NO OUTPUT DATA
CELL VTR661 DELETED BECAUSE OF NO OUTPUT DATA
CELL VTR61 DELETED BECAUSE OF NO OUTPUT DATA
CELL PFLD61 DELETED BECAUSE OF NO OUTPUT DATA
CELL PFLS61 DELETED BECAUSE OF NO OUTPUT DATA
CELL PTP61 DELETED BECAUSE OF NO OUTPUT DATA
CELL PTP661 DELETED BECAUSE OF NO OUTPUT DATA
CELL PTPAD61 DELETED BECAUSE OF NO OUTPUT DATA
CELL PAD661 DELETED BECAUSE OF NO OUTPUT DATA
CELL M1PF661 DELETED BECAUSE OF NO OUTPUT DATA
CELL M2F5P61 DELETED BECAUSE OF NO OUTPUT DATA
CELL M3F5P61 DELETED BECAUSE OF NO OUTPUT DATA

----- OUTPUT CELL SUMMARY -----

CELL-NAME	LAYER #	W	I	N	D	O	W	---
DATA TYPE								
PPSP735	35/0	-1754.30	-2029.80	1830.70	1513.65	1206.8	0	
NSPFT35		821.30	455.08	1260.60	758.08	0		

L:	AEED, SMALL, SR	LAYER:	8	PRO/GEODE/ACUTE	83, 900	PROCESS
97, 800	212, 350	96, 600	213, 550	183, 500	183, 500	183, 500
83, 900	188, 550	82, 400	187, 050	79, 500	187, 050	79, 500
79, 400	187, 150	79, 400	171, 700	77, 400	171, 700	77, 400
77, 400	187, 450	75, 900	145, 950	73, 000	145, 950	73, 000
71, 500	147, 450	71, 500	155, 950	73, 000	155, 950	73, 000
57, 900	157, 450	77, 400	155, 950	77, 400	155, 950	77, 400
79, 400	173, 700	79, 400	187, 150	78, 000	187, 150	78, 000
78, 500	196, 875	79, 675	198, 550	82, 400	198, 550	82, 400
83, 900	197, 050	83, 900	213, 550	73, 000	213, 550	73, 000
71, 500	215, 050	71, 500	244, 650	57, 225	244, 650	57, 225
54, 800	242, 225	54, 800	245, 000	130, 000	245, 000	130, 000
79, 800	140, 550	81, 800	140, 550	79, 800	140, 550	79, 800
97, 800	130, 000	97, 800	212, 350	81, 800	212, 350	81, 800
<hr/>						
L:	ESD	LAYER:	8	PRO/GBD, ACUTE	83, 900	PROCESS
95, 250	212, 000	93, 750	211, 500	81, 050	211, 500	81, 050
81, 050	188, 500	79, 500	187, 000	76, 650	187, 000	76, 650
75, 150	188, 500	75, 150	190, 750	76, 900	190, 750	76, 900
79, 550	198, 500	81, 050	197, 000	81, 050	197, 000	81, 050
74, 550	213, 500	81, 050	163, 900	73, 050	163, 900	73, 050
76, 150	160, 400	66, 650	161, 900	68, 350	161, 900	68, 350

X887apnchkfp.sum

X887apnchkfp.sum

Exhibit 5
Serial No. 10/717,394
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Exhibit 5
Serial No. 10/717,394
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```
***** /N* DRACULA ( REV. 4.7-03-2000 / SUN-4 SSRE /GENDATE: 29-FEB/2000 )
***** ( Copyright 1995, Cadence ) ****
*/NR* EXEC TIME = 11:46:40 DATE = 14-MAY-2002 HOSTNAME = xkz
```

ALL ERROR CELLS LISTING

X887aadrc.sum

X887aadrc.sum

Exhibit 5
Serial No. 10/717,394
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----- OUTPUT CELL SUMMARY -----

CELL-NAME	LAYER #	---	W I N D O W	---	# OF POLYGONS (VERT)	
		DATATYPE			(LINE SEGMENTS)	
PPSPST35	35/ 0	-1754.30	-2029.80	1830.70	1513.65	1206
PPSPST35	35/ 0	821.30	455.08	1250.66	758.02	0

OUTDISK PRIMARY CELL : OUT9897A

WINDOW : -1754.30 -2029.80 1830.70 1513.65

ENDED AT TIME =11:46:42 DATE =14-MAY-2002

***** PROBLEM GEOMETRY ERROR LISTING *****

Exhibit 5
Serial No. 10/717,394
page 23 of 46

71.500 215.050 71.500 244.650 57.225 244.650 89.500 207.000 38.000 205.500 84.500
 54.800 242.225 54.800 130.000 79.800 130.000 83.000 207.000 83.000 215.500 84.500 217.000
 79.800 140.550 81.800 140.550 97.800 212.350 88.000 217.000 88.500 215.500 89.500 232.000
 97.800 130.000 97.800 212.350 - PROCESSED 213.400 263.400 78.600 232.000 77.100 213.500 80.000 263.000
 CELL: AEDD_SWA1L_SR LAYER: 8 PRO/GEO:ACUTE 83.900 213.550 79.500 187.050 77.400 171.700 78.600 232.000 77.100 213.550 80.000 263.000
 87.800 212.350 96.600 82.400 187.050 79.500 187.050 80.000 130.800 82.000 130.800 82.000 130.000
 83.900 188.550 82.400 187.050 79.500 187.050 80.000 130.800 82.000 130.800 82.000 130.000
 79.400 187.150 79.400 171.700 77.400 171.700 78.600 232.000 77.100 213.550 80.000 130.800 82.000 130.000
 79.400 171.450 75.900 145.950 73.000 145.950 73.000 145.950 73.000 145.950 73.000 145.950 73.000 145.950
 71.500 157.450 71.500 155.950 77.400 155.950 77.400 155.950 77.400 155.950 77.400 155.950 77.400 155.950
 75.900 173.700 79.400 187.150 78.000 188.550 82.400 198.550 73.000 145.050 98.000 145.050 98.000 145.050
 79.400 196.875 79.400 187.150 78.000 188.550 82.400 198.550 73.000 145.050 98.000 145.050 98.000 145.050
 83.900 197.050 83.900 213.550 57.225 244.650 79.800 130.000 81.800 130.000 100.000 130.800 100.000 130.800 100.000
 71.500 215.050 71.500 244.650 57.225 244.650 79.800 130.000 81.800 130.000 114.000 130.500 114.000 130.500 114.000
 54.800 242.225 54.800 130.000 97.800 212.350 - PROCESSED 213.550 80.000 130.800 100.000 110.000 130.500 110.000 130.500
 79.800 140.550 81.800 140.550 81.800 140.550 81.800 140.550 81.800 140.550 81.800 140.550 81.800 140.550
 97.800 130.000 97.800 212.350 **** END OF PROBLEM GEOMETRY LISTING ****
 CELL: ESD LAYER: 8 PRO/GEO:ACUTE - PROCESSED 213.550 80.000 130.800 100.000 110.000 130.500 110.000 130.500
 95.250 212.000 93.750 213.500 81.050 213.500 81.050 213.500 81.050 213.500 81.050 213.500 81.050 213.500
 81.050 188.500 79.550 187.000 76.650 187.000 76.650 187.000 76.650 187.000 76.650 187.000 76.650 187.000
 75.150 188.500 75.150 196.750 76.900 196.750 76.900 196.750 76.900 196.750 76.900 196.750 76.900 196.750
 79.550 198.500 81.050 197.000 81.050 213.500 81.050 213.500 81.050 213.500 81.050 213.500 81.050 213.500
 74.550 213.500 74.550 161.900 73.000 161.900 73.000 161.900 73.000 161.900 73.000 161.900 73.000 161.900
 70.150 160.400 68.650 161.900 68.650 161.900 68.650 161.900 68.650 161.900 68.650 161.900 68.650 161.900
 70.150 171.900 70.050 171.900 70.050 171.900 70.050 171.900 70.050 171.900 70.050 171.900 70.050 171.900
 74.550 213.500 74.550 213.500 74.550 213.500 74.550 213.500 74.550 213.500 74.550 213.500 74.550 213.500
 68.650 244.600 54.250 244.600 54.250 244.600 54.250 244.600 54.250 244.600 54.250 244.600 54.250 244.600
 52.450 153.000 95.250 153.000 95.250 153.000 95.250 153.000 95.250 153.000 95.250 153.000 95.250 153.000
 CELL: AEDD_NSR LAYER: 8 PRO/GEO:ACUTE - PROCESSED 213.550 80.000 130.800 100.000 110.000 130.500 110.000 130.500
 97.800 212.350 96.600 213.550 83.900 213.550 83.900 213.550 83.900 213.550 83.900 213.550 83.900 213.550
 83.900 188.550 82.400 187.050 79.500 187.050 79.500 187.050 79.500 187.050 79.500 187.050 79.500 187.050
 79.400 187.150 79.400 171.700 77.400 171.700 77.400 171.700 77.400 171.700 77.400 171.700 77.400 171.700
 77.400 147.450 75.900 145.950 73.000 145.950 73.000 145.950 73.000 145.950 73.000 145.950 73.000 145.950
 71.500 147.450 71.500 155.950 73.000 155.950 73.000 155.950 73.000 155.950 73.000 155.950 73.000 155.950
 75.900 157.450 77.400 155.950 77.400 173.700 77.400 173.700 77.400 173.700 77.400 173.700 77.400 173.700
 79.400 173.700 79.400 187.150 78.000 188.550 82.400 198.550 73.000 213.550 73.000 213.550 73.000 213.550
 78.000 196.850 79.700 198.550 82.400 198.550 82.400 198.550 82.400 198.550 82.400 198.550 82.400 198.550
 83.900 197.050 83.900 213.550 73.000 213.550 73.000 213.550 73.000 213.550 73.000 213.550 73.000 213.550
 71.500 215.050 71.500 244.650 57.175 244.650 57.175 244.650 57.175 244.650 57.175 244.650 57.175 244.650
 54.800 242.275 54.800 130.000 79.800 130.000 79.800 130.000 79.800 130.000 79.800 130.000 79.800 130.000
 79.400 140.550 81.800 140.550 81.800 140.550 81.800 140.550 81.800 140.550 81.800 140.550 81.800 140.550
 79.800 130.000 97.800 212.350 - PROCESSED 213.550 80.000 130.800 100.000 110.000 130.500 110.000 130.500
 CELL: ESD_POWER_AUDIO LAYER: 8 PRO/GEO:ACUTE - PROCESSED 213.550 80.000 130.800 100.000 110.000 130.500 110.000 130.500
 34.800 21.600 24.400 21.600 24.400 30.000 33.800 24.400 33.800 20.100 21.100 22.000 21.100 22.000
 26.400 30.000 26.400 25.000 21.600 23.500 21.600 23.500 21.600 23.500 21.600 23.500 21.600 23.500
 23.500 21.600 22.000 21.600 20.900 20.900 20.900 20.900 20.900 20.900 20.900 20.900 20.900 20.900
 -0.600 0.900 -0.600 0.900 0.900 0.900 0.900 0.900 0.900 0.900 0.900 0.900 0.900 0.900
 22.000 64.400 23.500 63.400 23.500 63.400 23.500 63.400 23.500 63.400 23.500 63.400 23.500 63.400
 25.000 43.600 34.800 43.600 34.800 43.600 34.800 43.600 34.800 43.600 34.800 43.600 34.800 43.600
 CELL: ESDCUT LAYER: 8 PRO/GEO:ACUTE - PROCESSED 232.000 94.700 209.000 94.700 211.000 109.500 232.000 89.500 232.000 89.500 232.000 89.500 232.000

```

***** LVSNET SUMMARY REPORT *****

REFECT VALUE= 0.000000

***** REDUCE (LAYOUT) SUMMARY REPORT *****

***** STATISTICS BEFORE REDUCE *****
 291615   BJT   RES   DIODE  CAP   UND   BOX   0   CEL: 0   LDD  0
 195     961   163   663   0     0     0     0     0     0     0     0
MOS      BJT   RES   DIODE  CAP   UND   BOX   0   CEL: 0   LDD  0
 291615   195   961   163   663   0     0     0     0     0     0     0
OPTION TO SMASH PARALLEL DEVICES IS -- ON
OPTION TO CONSTRUCT MOS PARALLEL/SERIES STRUCTURES IS -- ON
OPTION TO SMASH PSEUDO PARALLEL DEVICES IS -- ON
OPTION TO FORE CMOG GATES IS -- ON
OPTION TO EXTRACT SUBSTRATE NODES OF GATES IS -- OFF

***** STATISTICS AFTER REDUCE *****
 58627   BJT   RES   INV   DIODE  CAP   UND   BOX   0   CEL: 0   LDD  0
 168     706   5627  96    571   63    58    0     0     0     0     0
 58627   BJT   RES   INV   DIODE  CAP   UND   BOX   0   CEL: 0   LDD  0
 168     706   5627  96    571   63    58    0     0     0     0     0
PUP1    SDW   PDW   SUP   PUP   AND   OR    NAND  0     0     0     0     0
 183     165   128    387  131   513   2521  384  11199  0     0     0     0     0
NOR    OR:1  UND   BOX   CBL:0 LDD   SMD  0     0     0     0     0
 19229   1925   0     0     0     0     0     0     0     0     0     0     0
DRAM   SRAM  0     0     0     0     0     0     0     0     0     0     0
 19229   1925   0     0     0     0     0     0     0     0     0     0     0
AGND   ALND  67    AGND  68    AGND  69    ALND  70    AVDD  71    DGND  72    DVDD  73    OGND  74    OVDD  75    PGND  76    PVDD  77    SUBGND  78    SUBGND  79    AGND  80    AGND  81    ALND  82    AVDD  83    DGND  84    DVDD  85    OGND  86    OVDD  87    PGND  88    PVDD  89    SUBGND  90    SUBGND  91    AGND  92    AGND  93    ALND  94    AVDD  95    DGND  96    DVDD  97    OGND  98    OVDD  99    PGND  100   PVDD  101   SUBGND  102   SUBGND  103   AGND  104   AGND  105   ALND  106   AVDD  107   DGND  108   DVDD  109   OGND  110   OVDD  111   PGND  112   PVDD  113   SUBGND  114   SUBGND  115   AGND  116   AGND  117   ALND  118   AVDD  119   DGND  120   DVDD  121   OGND  122   OVDD  123   PGND  124   PVDD  125   SUBGND  126   SUBGND  127   AGND  128   AGND  129   ALND  130   AVDD  131   DGND  132   DVDD  133   OGND  134   OVDD  135   PGND  136   PVDD  137   SUBGND  138   SUBGND  139   AGND  140   AGND  141   ALND  142   AVDD  143   DGND  144   DVDD  145   OGND  146   OVDD  147   PGND  148   PVDD  149   SUBGND  150   SUBGND  151   AGND  152   AGND  153   ALND  154   AVDD  155   DGND  156   DVDD  157   OGND  158   OVDD  159   PGND  160   PVDD  161   SUBGND  162   SUBGND  163   AGND  164   AGND  165   ALND  166   AVDD  167   DGND  168   DVDD  169   OGND  170   OVDD  171   PGND  172   PVDD  173   SUBGND  174   SUBGND  175   AGND  176   AGND  177   ALND  178   AVDD  179   DGND  180   DVDD  181   OGND  182   OVDD  183   PGND  184   PVDD  185   SUBGND  186   SUBGND  187   AGND  188   AGND  189   ALND  190   AVDD  191   DGND  192   DVDD  193   OGND  194   OVDD  195   PGND  196   PVDD  197   SUBGND  198   SUBGND  199   AGND  200   AGND  201   ALND  202   AVDD  203   DGND  204   DVDD  205   OGND  206   OVDD  207   PGND  208   PVDD  209   SUBGND  210   SUBGND  211   AGND  212   AGND  213   ALND  214   AVDD  215   DGND  216   DVDD  217   OGND  218   OVDD  219   PGND  220   PVDD  221   SUBGND  222   SUBGND  223   AGND  224   AGND  225   ALND  226   AVDD  227   DGND  228   DVDD  229   OGND  230   OVDD  231   PGND  232   PVDD  233   SUBGND  234   SUBGND  235   AGND  236   AGND  237   ALND  238   AVDD  239   DGND  240   DVDD  241   OGND  242   OVDD  243   PGND  244   PVDD  245   SUBGND  246   SUBGND  247   AGND  248   AGND  249   ALND  250   AVDD  251   DGND  252   DVDD  253   OGND  254   OVDD  255   PGND  256   PVDD  257   SUBGND  258   SUBGND  259   AGND  260   AGND  261   ALND  262   AVDD  263   DGND  264   DVDD  265   OGND  266   OVDD  267   PGND  268   PVDD  269   SUBGND  270   SUBGND  271   AGND  272   AGND  273   ALND  274   AVDD  275   DGND  276   DVDD  277   OGND  278   OVDD  279   PGND  280   PVDD  281   SUBGND  282   SUBGND  283   AGND  284   AGND  285   ALND  286   AVDD  287   DGND  288   DVDD  289   OGND  290   OVDD  291   PGND  292   PVDD  293   SUBGND  294   SUBGND  295   AGND  296   AGND  297   ALND  298   AVDD  299   DGND  300   DVDD  301   OGND  302   OVDD  303   PGND  304   PVDD  305   SUBGND  306   SUBGND  307   AGND  308   AGND  309   ALND  310   AVDD  311   DGND  312   DVDD  313   OGND  314   OVDD  315   PGND  316   PVDD  317   SUBGND  318   SUBGND  319   AGND  320   AGND  321   ALND  322   AVDD  323   DGND  324   DVDD  325   OGND  326   OVDD  327   PGND  328   PVDD  329   SUBGND  330   SUBGND  331   AGND  332   AGND  333   ALND  334   AVDD  335   DGND  336   DVDD  337   OGND  338   OVDD  339   PGND  340   PVDD  341   SUBGND  342   SUBGND  343   AGND  344   AGND  345   ALND  346   AVDD  347   DGND  348   DVDD  349   OGND  350   OVDD  351   PGND  352   PVDD  353   SUBGND  354   SUBGND  355   AGND  356   AGND  357   ALND  358   AVDD  359   DGND  360   DVDD  361   OGND  362   OVDD  363   PGND  364   PVDD  365   SUBGND  366   SUBGND  367   AGND  368   AGND  369   ALND  370   AVDD  371   DGND  372   DVDD  373   OGND  374   OVDD  375   PGND  376   PVDD  377   SUBGND  378   SUBGND  379   AGND  380   AGND  381   ALND  382   AVDD  383   DGND  384   DVDD  385   OGND  386   OVDD  387   PGND  388   PVDD  389   SUBGND  390   SUBGND  391   AGND  392   AGND  393   ALND  394   AVDD  395   DGND  396   DVDD  397   OGND  398   OVDD  399   PGND  400   PVDD  401   SUBGND  402   SUBGND  403   AGND  404   AGND  405   ALND  406   AVDD  407   DGND  408   DVDD  409   OGND  410   OVDD  411   PGND  412   PVDD  413   SUBGND  414   SUBGND  415   AGND  416   AGND  417   ALND  418   AVDD  419   DGND  420   DVDD  421   OGND  422   OVDD  423   PGND  424   PVDD  425   SUBGND  426   SUBGND  427   AGND  428   AGND  429   ALND  430   AVDD  431   DGND  432   DVDD  433   OGND  434   OVDD  435   PGND  436   PVDD  437   SUBGND  438   SUBGND  439   AGND  440   AGND  441   ALND  442   AVDD  443   DGND  444   DVDD  445   OGND  446   OVDD  447   PGND  448   PVDD  449   SUBGND  450   SUBGND  451   AGND  452   AGND  453   ALND  454   AVDD  455   DGND  456   DVDD  457   OGND  458   OVDD  459   PGND  460   PVDD  461   SUBGND  462   SUBGND  463   AGND  464   AGND  465   ALND  466   AVDD  467   DGND  468   DVDD  469   OGND  470   OVDD  471   PGND  472   PVDD  473   SUBGND  474   SUBGND  475   AGND  476   AGND  477   ALND  478   AVDD  479   DGND  480   DVDD  481   OGND  482   OVDD  483   PGND  484   PVDD  485   SUBGND  486   SUBGND  487   AGND  488   AGND  489   ALND  490   AVDD  491   DGND  492   DVDD  493   OGND  494   OVDD  495   PGND  496   PVDD  497   SUBGND  498   SUBGND  499   AGND  500   AGND  501   ALND  502   AVDD  503   DGND  504   DVDD  505   OGND  506   OVDD  507   PGND  508   PVDD  509   SUBGND  510   SUBGND  511   AGND  512   AGND  513   ALND  514   AVDD  515   DGND  516   DVDD  517   OGND  518   OVDD  519   PGND  520   PVDD  521   SUBGND  522   SUBGND  523   AGND  524   AGND  525   ALND  526   AVDD  527   DGND  528   DVDD  529   OGND  530   OVDD  531   PGND  532   PVDD  533   SUBGND  534   SUBGND  535   AGND  536   AGND  537   ALND  538   AVDD  539   DGND  540   DVDD  541   OGND  542   OVDD  543   PGND  544   PVDD  545   SUBGND  546   SUBGND  547   AGND  548   AGND  549   ALND  550   AVDD  551   DGND  552   DVDD  553   OGND  554   OVDD  555   PGND  556   PVDD  557   SUBGND  558   SUBGND  559   AGND  560   AGND  561   ALND  562   AVDD  563   DGND  564   DVDD  565   OGND  566   OVDD  567   PGND  568   PVDD  569   SUBGND  570   SUBGND  571   AGND  572   AGND  573   ALND  574   AVDD  575   DGND  576   DVDD  577   OGND  578   OVDD  579   PGND  580   PVDD  581   SUBGND  582   SUBGND  583   AGND  584   AGND  585   ALND  586   AVDD  587   DGND  588   DVDD  589   OGND  590   OVDD  591   PGND  592   PVDD  593   SUBGND  594   SUBGND  595   AGND  596   AGND  597   ALND  598   AVDD  599   DGND  600   DVDD  601   OGND  602   OVDD  603   PGND  604   PVDD  605   SUBGND  606   SUBGND  607   AGND  608   AGND  609   ALND  610   AVDD  611   DGND  612   DVDD  613   OGND  614   OVDD  615   PGND  616   PVDD  617   SUBGND  618   SUBGND  619   AGND  620   AGND  621   ALND  622   AVDD  623   DGND  624   DVDD  625   OGND  626   OVDD  627   PGND  628   PVDD  629   SUBGND  630   SUBGND  631   AGND  632   AGND  633   ALND  634   AVDD  635   DGND  636   DVDD  637   OGND  638   OVDD  639   PGND  640   PVDD  641   SUBGND  642   SUBGND  643   AGND  644   AGND  645   ALND  646   AVDD  647   DGND  648   DVDD  649   OGND  650   OVDD  651   PGND  652   PVDD  653   SUBGND  654   SUBGND  655   AGND  656   AGND  657   ALND  658   AVDD  659   DGND  660   DVDD  661   OGND  662   OVDD  663   PGND  664   PVDD  665   SUBGND  666   SUBGND  667   AGND  668   AGND  669   ALND  670   AVDD  671   DGND  672   DVDD  673   OGND  674   OVDD  675   PGND  676   PVDD  677   SUBGND  678   SUBGND  679   AGND  680   AGND  681   ALND  682   AVDD  683   DGND  684   DVDD  685   OGND  686   OVDD  687   PGND  688   PVDD  689   SUBGND  690   SUBGND  691   AGND  692   AGND  693   ALND  694   AVDD  695   DGND  696   DVDD  697   OGND  698   OVDD  699   PGND  700   PVDD  701   SUBGND  702   SUBGND  703   AGND  704   AGND  705   ALND  706   AVDD  707   DGND  708   DVDD  709   OGND  710   OVDD  711   PGND  712   PVDD  713   SUBGND  714   SUBGND  715   AGND  716   AGND  717   ALND  718   AVDD  719   DGND  720   DVDD  721   OGND  722   OVDD  723   PGND  724   PVDD  725   SUBGND  726   SUBGND  727   AGND  728   AGND  729   ALND  730   AVDD  731   DGND  732   DVDD  733   OGND  734   OVDD  735   PGND  736   PVDD  737   SUBGND  738   SUBGND  739   AGND  740   AGND  741   ALND  742   AVDD  743   DGND  744   DVDD  745   OGND  746   OVDD  747   PGND  748   PVDD  749   SUBGND  750   SUBGND  751   AGND  752   AGND  753   ALND  754   AVDD  755   DGND  756   DVDD  757   OGND  758   OVDD  759   PGND  760   PVDD  761   SUBGND  762   SUBGND  763   AGND  764   AGND  765   ALND  766   AVDD  767   DGND  768   DVDD  769   OGND  770   OVDD  771   PGND  772   PVDD  773   SUBGND  774   SUBGND  775   AGND  776   AGND  777   ALND  778   AVDD  779   DGND  780   DVDD  781   OGND  782   OVDD  783   PGND  784   PVDD  785   SUBGND  786   SUBGND  787   AGND  788   AGND  789   ALND  790   AVDD  791   DGND  792   DVDD  793   OGND  794   OVDD  795   PGND  796   PVDD  797   SUBGND  798   SUBGND  799   AGND  800   AGND  801   ALND  802   AVDD  803   DGND  804   DVDD  805   OGND  806   OVDD  807   PGND  808   PVDD  809   SUBGND  810   SUBGND  811   AGND  812   AGND  813   ALND  814   AVDD  815   DGND  816   DVDD  817   OGND  818   OVDD  819   PGND  820   PVDD  821   SUBGND  822   SUBGND  823   AGND  824   AGND  825   ALND  826   AVDD  827   DGND  828   DVDD  829   OGND  830   OVDD  831   PGND  832   PVDD  833   SUBGND  834   SUBGND  835   AGND  836   AGND  837   ALND  838   AVDD  839   DGND  840   DVDD  841   OGND  842   OVDD  843   PGND  844   PVDD  845   SUBGND  846   SUBGND  847   AGND  848   AGND  849   ALND  850   AVDD  851   DGND  852   DVDD  853   OGND  854   OVDD  855   PGND  856   PVDD  857   SUBGND  858   SUBGND  859   AGND  860   AGND  861   ALND  862   AVDD  863   DGND  864   DVDD  865   OGND  866   OVDD  867   PGND  868   PVDD  869   SUBGND  870   SUBGND  871   AGND  872   AGND  873   ALND  874   AVDD  875   DGND  876   DVDD  877   OGND  878   OVDD  879   PGND  880   PVDD  881   SUBGND  882   SUBGND  883   AGND  884   AGND  885   ALND  886   AVDD  887   DGND  888   DVDD  889   OGND  890   OVDD  891   PGND  892   PVDD  893   SUBGND  894   SUBGND  895   AGND  896   AGND  897   ALND  898   AVDD  899   DGND  900   DVDD  901   OGND  902   OVDD  903   PGND  904   PVDD  905   SUBGND  906   SUBGND  907   AGND  908   AGND  909   ALND  910   AVDD  911   DGND  912   DVDD  913   OGND  914   OVDD  915   PGND  916   PVDD  917   SUBGND  918   SUBGND  919   AGND  920   AGND  921   ALND  922   AVDD  923   DGND  924   DVDD  925   OGND  926   OVDD  927   PGND  928   PVDD  929   SUBGND  930   SUBGND  931   AGND  932   AGND  933   ALND  934   AVDD  935   DGND  936   DVDD  937   OGND  938   OVDD  939   PGND  940   PVDD  941   SUBGND  942   SUBGND  943   AGND  944   AGND  945   ALND  946   AVDD  947   DGND  948   DVDD  949   OGND  950   OVDD  951   PGND  952   PVDD  953   SUBGND  954   SUBGND  955   AGND  956   AGND  957   ALND  958   AVDD  959   DGND  960   DVDD  961   OGND  962   OVDD  963   PGND  964   PVDD  965   SUBGND  966   SUBGND  967   AGND  968   AGND  969   ALND  970   AVDD  971   DGND  972   DVDD  973   OGND  974   OVDD  975   PGND  976   PVDD  977   SUBGND  978   SUBGND  979   AGND  980   AGND  981   ALND  982   AVDD  983   DGND  984   DVDD  985   OGND  986   OVDD  987   PGND  988   PVDD  989   SUBGND  990   SUBGND  991   AGND  992   AGND  993   ALND  994   AVDD  995   DGND  996   DVDD  997   OGND  998   OVDD  999   PGND  1000   PVDD  1001   SUBGND  1002   SUBGND  1003   AGND  1004   AGND  1005   ALND  1006   AVDD  1007   DGND  1008   DVDD  1009   OGND  1010   OVDD  1011   PGND  1012   PVDD  1013   SUBGND  1014   SUBGND  1015   AGND  1016   AGND  1017   ALND  1018   AVDD  1019   DGND  1020   DVDD  1021   OGND  1022   OVDD  1023   PGND  1024   PVDD  1025   SUBGND  1026   SUBGND  1027   AGND  1028   AGND  1029   ALND  1030   AVDD  1031   DGND  1032   DVDD  1033   OGND  1034   OVDD  1035   PGND  1036   PVDD  1037   SUBGND  1038   SUBGND  1039   AGND  1040   AGND  1041   ALND  1042   AVDD  1043   DGND  1044   DVDD  1045   OGND  1046   OVDD  1047   PGND  1048   PVDD  1049   SUBGND  1050   SUBGND  1051   AGND  1052   AGND  1053   ALND  1054   AVDD  1055   DGND  1056   DVDD  1057   OGND  1058   OVDD  1059   PGND  1060   PVDD  1061   SUBGND  1062   SUBGND  1063   AGND  1064   AGND  1065   ALND  1066   AVDD  1067   DGND  1068   DVDD  1069   OGND  1070   OVDD  1071   PGND  1072   PVDD  1073   SUBGND  1074   SUBGND  1075   AGND  1076   AGND  1077   ALND  1078   AVDD  1079   DGND  1080   DVDD  1081   OGND  1082   OVDD  1083   PGND  1084   PVDD  1085   SUBGND  1086   SUBGND  1087   AGND  1088   AGND  1089   ALND  1090   AVDD  1091   DGND  1092   DVDD  1093   OGND  1094   OVDD  1095   PGND  1096   PVDD  1097   SUBGND  1098   SUBGND  1099   AGND  1100   AGND  1101   ALND  1102   AVDD  1103   DGND  1104   DVDD  1105   OGND  1106   OVDD  1107   PGND  1108   PVDD  1109   SUBGND  1110   SUBGND  1111   AGND  1112   AGND  1113   ALND  1114   AVDD  1115   DGND  1116   DVDD  1117   OGND  1118   OVDD  1119   PGND  1120   PVDD  1121   SUBGND  1122   SUBGND  1123   AGND  1124   AGND  1125   ALND  1126   AVDD  1127   DGND  1128   DVDD  1129   OGND  1130   OVDD  1131   PGND  1132   PVDD  1133   SUBGND  1134   SUBGND  1135   AGND  1136   AGND  1137   ALND  1138   AVDD  1139   DGND  1140   DVDD  1141   OGND  1142   OVDD  1143   PGND  1144   PVDD  1145   SUBGND  1146   SUBGND  1147   AGND  1148   AGND  1149   ALND  1150   AVDD  1151   DGND  1152   DVDD  1153   OGND  1154   OVDD  1155   PGND  1156   PVDD  1157   SUBGND  1158   SUBGND  1159   AGND  1160   AGND  1161   ALND  1162   AVDD  1163   DGND  1164   DVDD  1165   OGND  1166   OVDD  1167   PGND  1168   PVDD  1169   SUBGND  1170   SUBGND  1171   AGND  1172   AGND  1173   ALND  1174   AVDD  1175   DGND  1176   DVDD  1177   OGND  1178   OVDD  1179   PGND  1180   PVDD  1181   SUBGND  1182   SUBGND  1183   AGND  1184   AGND  1185   ALND  1186   AVDD  1187   DGND  1188   DVDD  1189   OGND  1190   OVDD  1191   PGND  1192   PVDD  1193   SUBGND  1194   SUBGND  1195   AGND  1196   AGND  1197   ALND  1198   AVDD  1199   DGND  1200   DVDD  1201   OGND  1202   OVDD  1203   PGND  1204   PVDD  1205   SUBGND  1206   SUBGND  1207   AGND  1208   AGND  1209   ALND  1210   AVDD  1211   DGND  1212   DVDD  1213   OGND  1214   OVDD  1215   PGND  1216   PVDD  1217   SUBGND  1218   SUBGND  1219   AGND  1220   AGND  1221   ALND  1222   AVDD  1223   DGND  1224   DVDD  1225   OGND  1226   OVDD  1227   PGND  1228   PVDD  1229   SUBGND  1230   SUBGND  1231   AGND  1232   AGND  1233   ALND  1234   AVDD  1235   DGND  1236   DVDD  1237   OGND  1238   OVDD  1239   PGND  1240   PVDD  1241   SUBGND  1242   SUBGND  1243   AGND  1244   AGND  1245   ALND  1246   AVDD  1247   DGND  1248   DVDD  1249   OGND  1250   OVDD  1251   PGND  1252   PVDD  1253   SUBGND  1254   SUBGND  1255   AGND  1256   AGND  1257   ALND  1258   AVDD  1259   DGND  1260   DVDD  1261   OGND  1262   OVDD  1263   PGND  1264   PVDD  1265   SUBGND  1266   SUBGND  1267   AGND  1268   AGND  1269   ALND  1270   AVDD  1271   DGND  1272   DVDD  1273   OGND  1274   OVDD  1275   PGND  1276   PVDD  1277   SUBGND  1278   SUBGND  1279   AGND  1280   AGND  1281   ALND  1282   AVDD  1283   DGND  1284   DVDD  1285   OGND  1286   OVDD  1287   PGND  1288   PVDD  1289   SUBGND  1290   SUBGND  1291   AGND  1292   AGND  1293   ALND  1294   AVDD  1295   DGND  1296   DVDD  1297   OGND  1298   OVDD  1299   PGND  1300   PVDD  1301   SUBGND  1302   SUBGND  1303   AGND  1304   AGND  1305   ALND  1306   AVDD  1307   DGND  1308   DVDD  1309   OGND  1310   OVDD  1311   PGND  1312   PVDD  1313   SUBGND  1314   SUBGND  1315   AGND  1316   AGND  1317   ALND  1318   AVDD  1319   DGND 
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green_out_b<2>	30	green_out_b<2>	12704	I	red_out_a<1>	57	red_out_a<1>	16319	I
blue_out_a<3>	5	blue_out_a<3>	10037	I	red_out_a<2>	56	red_out_a<2>	16320	I
blue_out_a<2>	6	blue_out_a<2>	9114	I	red_out_a<3>	55	red_out_a<3>	16321	I
blue_out_a<1>	7	blue_out_a<1>	8189	I	red_out_a<4>	54	red_out_a<4>	16322	I
blue_out_a<0>	8	blue_out_a<0>	7412	I	red_out_a<5>	53	red_out_a<5>	16323	I
green_out_b<3>	29	green_out_b<3>	12736	I	red_out_a<6>	52	red_out_a<6>	16324	I
green_out_b<2>	28	green_out_b<2>	13007	I	red_out_a<7>	51	red_out_a<7>	16325	I
green_out_b<5>	27	green_out_b<5>	13341	I	red_out_b<0>	66	red_out_b<0>	16327	I
green_out_b<6>	26	green_out_b<6>	14560	I	red_out_b<1>	65	red_out_b<1>	16331	I
pad_XRIT_OUT	82	pad_XRIT_OUT	29	I	red_out_b<2>	64	red_out_b<2>	16332	I
green_out_a<7>	17	green_out_a<7>	16177	I	red_out_b<3>	63	red_out_b<3>	16333	I
pad_A0	83	pad_A0	6124	I	red_out_b<4>	62	red_out_b<4>	16334	I
pad_A1	84	pad_A1	4847	I	red_out_b<5>	61	red_out_b<5>	16335	I
pad_Bain	85	pad_Bain	12569	I	red_out_b<6>	60	red_out_b<6>	16336	I
pad_Bclampv	86	pad_Bclampv	12490	I	red_out_b<7>	59	red_out_b<7>	16337	I
pad_Bnids	33	pad_Bnids	12626	I	***TOP***	108***	red_out_b<7>	16337	I
pad_Ckext	34	pad_Ckext	398	I	*** BIG SCH NODE : PWD	76	CONN =	157	
pad_Ctl0	34	pad_Ctl0	8	I	*** BIG SCH NODE : ALIGN	67	CONN =	778	
pad_Ctl1	35	pad_Ctl1	9	I	*** BIG SCH NODE : ALIGN	68	CONN =	420	
pad_Ctl2	36	pad_Ctl2	10	I	*** BIG SCH NODE : ALIGN	69	CONN =	215	
pad_Ctl3_MCI	37	pad_Ctl3_MCI	11	I	*** BIG SCH NODE : ALIGN	70	CONN =	715	
pad_Ckinv	87	pad_Ckinv	9820	I	*** BIG SCH NODE : DND	71	CONN =	465	
pad_Coast	88	pad_Coast	553	I	*** BIG SCH NODE : DND	72	CONN =	353	
pad_D8	38	pad_D8	16330	I	*** WARNING ** UN-LABELED BIG SCH NODE =	76	CONN =	110	
pad_Dv1scl	89	pad_Dv1scl	26	I	*** WARNING ** UN-LABELED BIG SCH NODE =	133	CONN =	235	
pad_Dv1sda	39	pad_Dv1sda	25	I	*** WARNING ** UN-LABELED BIG SCH NODE =	295	CONN =	389	
pad_Gclampv	90	pad_Gclampv	15666	I	*** WARNING ** UN-LABELED BIG SCH NODE =	247	CONN =	209	
pad_Gain	91	pad_Gain	15701	I	*** WARNING ** UN-LABELED BIG SCH NODE =	272	CONN =	2657	
pad_Gmidsc	40	pad_Gmidsc	15707	I	*** WARNING ** UN-LABELED BIG SCH NODE =	296	CONN =	290	
pad_Hsync	92	pad_Hsync	144	I	*** WARNING ** UN-LABELED BIG SCH NODE =	28359	CONN =	305	
pad_Hdri	41	pad_Hdri	24	I	*** WARNING ** UN-LABELED BIG SCH NODE =	28360	CONN =	338	
pad_Refout	42	pad_Refout	16494	I	*** WARNING ** UN-LABELED BIG SCH NODE =	28761	CONN =	338	
pad_Rain	93	pad_Rain	16193	I	*** WARNING ** UN-LABELED BIG SCH NODE =	28262	CONN =	338	
pad_Rlampv	94	pad_Rlampv	16176	I	*** WARNING ** UN-LABELED BIG SCH NODE =	28364	CONN =	206	
pad_Refin	95	pad_Refin	16495	I	*** WARNING ** UN-LABELED BIG SCH NODE =	8365	CONN =	206	
pad_Rnidsc	43	pad_Rnidsc	16488	I	*** WARNING ** UN-LABELED BIG SCH NODE =	28366	CONN =	206	
pad_Rleem	96	pad_Rleem	15	I	*** WARNING ** UN-LABELED BIG SCH NODE =	28279	CONN =	581	
pad_Rxon	97	pad_Rxon	21	I	*** BIG LAY NODE : DND	13	CONN =	353	
pad_Rx0p	98	pad_Rx0p	20	I	*** BIG LAY NODE : DND	14	CONN =	465	
pad_Rx1n	99	pad_Rx1n	19	I	*** BIG LAY NODE : DND	28	CONN =	157	
pad_Rx1p	100	pad_Rx1p	18	I	*** WARNING ** UN-LABELED BIG LAY NODE =	48	CONN =	209	
pad_Rx2n	101	pad_Rx2n	17	I	*** WARNING ** UN-LABELED BIG LAY NODE =	53	CONN =	290	
pad_Rx2p	102	pad_Rx2p	16	I	*** BIG LAY NODE : AGND	74	CONN =	778	
pad_Rxca	79	pad_Rxca	23	I	*** BIG LAY NODE : AGND	82	CONN =	715	
pad_Rxcp	80	pad_Rxcp	22	I	*** BIG LAY NODE : AGND	100	CONN =	420	
pad_Scanck	103	pad_Scanck	12	I	*** WARNING ** UN-LABELED BIG LAY NODE =	237	CONN =	2657	
pad_Scanic	104	pad_Scanic	16493	I	*** WARNING ** UN-LABELED BIG LAY NODE =	546	CONN =	235	
pad_Scanout	44	pad_Scanout	7	I	*** BIG LAY NODE : AGND	679	CONN =	215	
pad_Sci	105	pad_Sci	7232	I	*** WARNING ** UN-LABELED BIG LAY NODE =	777	CONN =	389	
pad_Sda	81	pad_Sda	8073	I	*** WARNING ** UN-LABELED BIG LAY NODE =	1614	CONN =	338	
pad_Sogin	106	pad_Sogin	15061	I	*** WARNING ** UN-LABELED BIG LAY NODE =	1616	CONN =	338	
pad_Sogcr	45	pad_Sogcr	16328	I	*** WARNING ** UN-LABELED BIG LAY NODE =	1637	CONN =	338	
pad_Syncdr	46	pad_Syncdr	16331	I	*** WARNING ** UN-LABELED BIG LAY NODE =	4641	CONN =	305	
pad_Vsout	47	pad_Vsout	16329	I	*** WARNING ** UN-LABELED BIG LAY NODE =	7388	CONN =	206	
pad_Vsync	107	pad_Vsync	57	I	*** WARNING ** UN-LABELED BIG LAY NODE =	1757	CONN =	298	
pad_Ciamp	108	pad_Ciamp	8931	I	*** WARNING ** UN-LABELED BIG LAY NODE =	1757	CONN =	206	
pad_Dattack	48	pad_Dattack	16333	I	*** WARNING ** UN-LABELED BIG LAY NODE =	8038	CONN =	206	
pad_Dattackb	49	pad_Dattackb	16332	I	*** WARNING ** UN-LABELED BIG LAY NODE =	2397	CONN =	581	
pad_Hsout	50	pad_Hsout	16326	I	NUMBER OF VALID CORRESPONDENCE NODE PAIRS =	97			


```

: ?DEV304 CAP PS : ?DEV517 CAP PS
: X=-41.10 Y=629.35 : X=-38.83 Y=1426.90
: ?94873, ?94525 : ?95013, ?94665
: ?DEV320 CAP PS : ?95033 CAP PS
: X=-105.60 Y=644.05 : X=-103.33 Y=1441.60
: ?94884, ?94536 : ?95024, ?94676
: ?DEV323 CAP PS : ?95036 CAP PS
: X=-41.10 Y=644.05 : X=-38.83 Y=1441.65
: ?94885, ?94537 : ?95025, ?94677
: ?DEV339 CAP PS : ?95038, ?94690
: X=-105.60 Y=658.75 : ?95040, ?94692
: ?94896, ?94548 : ?95042, ?94694
: ?DEV342 CAP PS : ?95053 CAP PS
: X=-41.10 Y=658.75 : X=-38.83 Y=1456.30
: ?94897, ?94549 : ?95056 CAP PS
: ?DEV358 CAP PS : X=-60.33 Y=1456.30
: X=-105.60 Y=673.45 : ?95059, ?94691
: ?94908, ?94560 : ?95067 CAP PS
: ?DEV361 CAP PS : X=-81.83 Y=1456.30
: X=-41.10 Y=673.50 : ?95038, ?94692
: ?94909, ?94561 : ?95062 CAP PS
: ?DEV389 CAP PS : X=-427.75 Y=-162.80
: X=-105.60 Y=688.15 : ?94720, ?94372
: ?94921, ?94573 : ?95073 CAP PS
: ?DEV390 CAP PS : X=-406.35 CAP PS
: X=-84.10 Y=688.15 : X=-38.83 Y=1456.30
: ?94922, ?94574 : ?95040, ?94692
: ?DEV391 CAP PS : ?95062 CAP PS
: X=-62.60 Y=688.15 : X=-427.75 Y=-162.80
: ?94923, ?94575 : ?94720, ?94372
: ?DEV392 CAP PS : ?95073 CAP PS
: X=-41.10 Y=688.15 : X=-406.35 CAP PS
: ?94924, ?94576 : X=-38.83 Y=1456.30
: ?DEV453 CAP PS : ?95040, ?94692
: X=-103.33 Y=1382.80 : ?95062 CAP PS
: ?94970, ?94622 : X=-427.75 Y=-162.80
: ?DEV454 CAP PS : ?94720, ?94374
: X=-81.83 Y=1382.80 : ?95073 CAP PS
: ?94971, ?94623 : X=-427.75 Y=-162.80
: ?DEV455 CAP PS : ?95040, ?94692
: X=-60.33 Y=1382.80 : ?95062 CAP PS
: ?94972, ?94624 : X=-384.95 CAP PS
: ?DEV456 CAP PS : X=-384.95 Y=-148.10
: X=-38.83 Y=1382.80 : ?95073, ?94387
: ?94973, ?94625 : ?95040, ?94692
: ?DEV475 CAP PS : X=-384.95 Y=-148.10
: X=-103.33 Y=1397.50 : ?95062 CAP PS
: ?94988, ?94640 : X=-427.75 Y=-118.70
: ?DEV479 CAP PS : ?94754, ?94406
: X=-38.83 Y=1397.50 : ?95010 CAP PS
: ?94989, ?94641 : ?94754, ?94406
: ?DEV475 CAP PS : ?95014 CAP PS
: X=-103.33 Y=1412.20 : X=-427.75 Y=-104.00
: ?95000, ?94652 : ?94776, ?94430
: ?DEV498 CAP PS : ?95016 CAP PS
: X=-38.83 Y=1412.20 : X=-384.95 Y=-104.00
: ?95001, ?94653 : ?94776, ?94419
: ?DEV514 CAP PS : ?95017 CAP PS
: X=-103.33 Y=1426.90 : X=-427.75 Y=-89.30
: ?95012, ?94664 : ?94790, ?94442

```

```

: ?DEV163 CAP PS
: X=-384.95 Y=-89.30
: ?94791, ?94443
: ?DEV192 CAP PS
: X=-427.75 Y=-74.60
: ?94802, ?94454
: ?DEV193 CAP PS
: X=-406.35 Y=-74.60
: ?94803, ?94455
: ?DEV194 CAP PS
: X=-384.95 Y=-74.60
: ?94804, ?94456
: ?DEV231 CAP PS
: X=-427.75 Y=-59.90
: ?94821, ?94473
: ?DEV232 CAP PS
: X=-406.35 Y=-59.90
: ?94822, ?94474
: ?DEV233 CAP PS
: X=-384.95 Y=-59.90
: ?94823, ?94475
: ?DEV256 CAP PS
: X=-427.80 Y=599.95
: ?94836, ?94488
: ?DEV257 CAP PS
: X=-406.40 Y=599.95
: ?94837, ?94489
: ?DEV258 CAP PS
: X=-385.00 Y=599.95
: ?94838, ?94490
: ?DEV275 CAP PS
: X=-427.80 Y=614.65
: ?94851, ?94503
: ?DEV276 CAP PS
: X=-406.40 Y=614.65
: ?94852, ?94504
: ?DEV277 CAP PS
: X=-385.00 Y=614.65
: ?94853, ?94505
: ?DEV298 CAP PS
: X=-427.80 Y=629.35
: ?94870, ?94522
: ?DEV300 CAP PS
: X=-385.00 Y=629.35
: ?94871, ?94523
: ?DEV317 CAP PS
: X=-427.80 Y=644.05
: ?94882, ?94534
: ?DEV319 CAP PS
: X=-385.00 Y=644.05
: ?94883, ?94535
: ?DEV336 CAP PS
: X=-427.80 Y=658.75
: ?94894, ?94546
: ?DEV338 CAP PS
: X=-385.00 Y=658.75
: ?94895, ?94547
: ?DEV355 CAP PS
: X=-427.80 Y=673.45
: ?94906, ?94558

```

```

: ?DEV357 CAP PS
: X=-385.00 Y=673.45
: ?94907, ?94559
: ?DEV386 CAP PS
: X=-427.80 Y=688.15
: ?94918, ?94570
: ?DEV387 CAP PS
: X=-406.40 Y=688.15
: ?94919, ?94571
: ?DEV388 CAP PS
: X=-385.00 Y=688.15
: ?94920, ?94572
: ?DEV405 CAP PS
: X=-427.80 Y=702.85
: ?94937, ?94589
: ?DEV406 CAP PS
: X=-406.40 Y=702.85
: ?94938, ?94590
: ?94952, ?94604
: ?DEV432 CAP PS
: X=-385.00 Y=702.85
: ?94953, ?94605
: ?DEV433 CAP PS
: X=-425.53 Y=1368.10
: ?94954, ?94606
: ?DEV450 CAP PS
: X=-404.13 Y=1368.10
: ?94955, ?94619
: ?DEV451 CAP PS
: X=-382.73 Y=1368.10
: ?94968, ?94620
: ?DEV452 CAP PS
: X=-425.53 Y=1382.80
: ?94967, ?94621
: ?DEV453 CAP PS
: X=-404.13 Y=1382.80
: ?94968, ?94623
: ?DEV454 CAP PS
: X=-382.73 Y=1382.80
: ?94969, ?94624
: ?DEV473 CAP PS
: X=-425.53 Y=1397.50
: ?94986, ?94638
: ?DEV475 CAP PS
: X=-382.73 Y=1397.50
: ?94987, ?94639
: ?DEV492 CAP PS
: X=-425.53 Y=1412.20
: ?94998, ?94650
: ?DEV494 CAP PS
: X=-382.73 Y=1412.20
: ?94999, ?94651
: ?DEV511 CAP PS
: X=-425.53 Y=1426.90
: ?95010, ?94662

```

THE REST OF UN-MATCHED LAYOUT DEVICES ARE NOT LISTED

***** LVS SUMMARY (REPEATED) *****

***** LVS DEVICE MATCH SUMMARY *****

NUMBER OF UN-MATCHED SCHEMATICS DEVICES = 0
 NUMBER OF UN-MATCHED LAYOUT DEVICES = 349
 NUMBER OF MATCHED SCHEMATICS DEVICES = 136213
 NUMBER OF MATCHED LAYOUT DEVICES = 136213

***** DEVICE MATCHING SUMMARY BY TYPE *****

TYPE	SUB-TYPE	TOTAL DEVICE	UN-MATCHED DEVICE
SCH.	LAY.	SCH.	LAY.
MOS	P	122675	122676
MOS	N	123029	123029
BJT	SP	168	168
RES	P	247	247
RES	M	1	1
RES	N	403	403
RES	M3	6	0
RES	AW	9	9
RES	P1	12	12
RES	P2	4	4
RES	B1	24	24
DIO	ND	96	96
CAP	N	21	21
CAP	P4	32	32
CAP	PS	170	518
			0
			348

***** SCHEMATIC AND LAYOUT MAY NOT MATCH *****
 -- CHECK ALL ABOVE DISCREPANCY
 AND WARNING MESSAGES

```

/N* DRACULA ( REV. 4.7 03-2000 / Sun-4 SSR4 /GENDATE: 29-FEB/2000 )
*/N* EXEC TIME = 11:42:50 DATE = 14-MAY-2002 HOSTNAME = firebird
*/I* # OF REGIONS MULTIPLE SOFT-CONNECTED = 4
*/I* PLEASE REFER TO .ERC FILE FOR DETAIL

***** INSNET SUMMARY REPORT *****

WEFFECT VALUE= 0.000000

***** REDUCE (LAYOUT) SUMMARY REPORT *****

***** STATISTICS BEFORE REDUCE *****

```

MOS	BJT	RES	DIODE	CAP	UND	BOX	CELL	LDD
291615	195	961	163	315	348	0	0	0

```

***** STATISTICS AFTER REDUCE *****

```

MOS	BJT	RES	INV	DIODE	CAP	UND	BOX	CELL	LDD
58627	168	706	5627	96	223	63	0	58	SDNIT
FET	SDW	PDM	SUP	FUP	AND	OR	AOI	NAND	PDW
183	170	128	387	136	513	2521	384	11194	RSR
NOR	OAI	UND	BOX	CELL	LDD	SDND	PDND	MOSCAP	DIODE
1929	1925	348	0	0	0	0	0	181	181
DRAM	SRAM	0	0	0	0	0	0	0	0

```

***** REDUCE (SCHEMATIC) SUMMARY REPORT *****

***** STATISTICS BEFORE REDUCE *****

```

MOS	BJT	RES	DIODE	CAP	UND	BOX	CELL	LDD
268800	191	807	115	264	0	0	0	0

```

***** STATISTICS AFTER REDUCE *****

```

MOS	BJT	RES	INV	DIODE	CAP	UND	BOX	CELL	LDD
58626	168	706	5627	96	223	63	0	58	SDNIT
FET	SDW	PDM	SUP	FUP	AND	OR	AOI	NAND	PDW
183	165	128	387	131	513	2521	384	11199	RSR
NOR	OAI	UND	BOX	CELL	LDD	SDND	PDND	MOSCAP	DIODE
1929	1925	0	0	0	0	0	0	181	181
DRAM	SRAM	0	0	0	0	0	0	0	0

```

***** INSNET SUMMARY REPORT *****

WEFFECT VALUE= 0.000000

***** REDUCE (LAYOUT) SUMMARY REPORT *****

***** STATISTICS BEFORE REDUCE *****

```

PRINTLINE	=	1000
WPERCENT(MOS)	=	2.000 %
UPERCENT(MOS)	=	1.000 %
BJT Emitter Area Check:	EMAPER=	5.000 %
CAPACITOR VALUE CHECK:	CYPER=	5.000 %
RESISTOR WIDTH CHECK:	RESWR=	2.000 %
RESISTOR LENGTH CHECK:	RESLR=	2.000 %
DIODE AREA CHECK:	DIAPER=	5.000 %
UNSPECIFIED SCHEMATICAL PARAMETERS ARE CONSIDERED AS MISMATCH		
UNSPECIFIED LAYOUT PARAMETERS ARE CONSIDERED AS MISMATCH		
***** CORRESPONDENCE NODE PAIRS *****		

```

***** INSNET SUMMARY REPORT *****

WEFFECT VALUE= 0.000000

***** REDUCE (SCHEMATIC) SUMMARY REPORT *****

***** STATISTICS BEFORE REDUCE *****

```

SCHEMATIC	LAYOUT	PAD TYPE
AGND	74	G
ALGND	100	G
ALVDD	679	P
AVDD	82	P
DGND	14	P
DVDD	13	P
OGND	6	G
OVDD	5	P
PGND	27	G
PVDD	28	P
SUBGND	4	G
green_out_b<0>	32	green_out_b<0>
green_out_a<6>	18	green_out_a<6>
green_out_a<5>	19	green_out_a<5>
green_out_a<4>	20	green_out_a<4>

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green_out_a<3>	21	green_out_a<3>	16016	pad_Rx2p	102	pad_Rx2p	16
green_out_a<2>	22	green_out_a<2>	15920	pad_Rxen	79	pad_Rxen	23
green_out_a<1>	23	green_out_a<1>	15731	pad_Rxcp	80	pad_Rxcp	22
green_out_a<0>	24	green_out_a<0>	15709	pad_Scanlk	103	pad_Scanlk	12
green_out_b<7>	25	green_out_b<7>	15195	pad_Scanin	104	pad_Scanin	12
blue_out_b<7>	9	blue_out_b<7>	3933	pad_Scanout	44	pad_Scanout	16493
blue_out_b<6>	10	blue_out_b<6>	2842	pad_SCL	105	pad_SCL	7
green_out_b<1>	31	green_out_b<1>	12665	pad_SDN	81	pad_SDN	8073
blue_out_b<5>	11	blue_out_b<5>	1719	pad_SGIN	106	pad_SGIN	15061
blue_out_b<4>	12	blue_out_b<4>	695	pad_SGOUT	45	pad_SGOUT	16328
blue_out_b<3>	13	blue_out_b<3>	626	pad_SyncD	46	pad_SyncD	16331
blue_out_b<2>	14	blue_out_b<2>	450	pad_VSOUT	47	pad_VSOUT	16329
blue_out_b<1>	15	blue_out_b<1>	162	pad_Vsync	107	pad_Vsync	57
blue_out_b<0>	16	blue_out_b<0>	67	pad_Clamp	108	pad_Clamp	8931
blue_out_a<7>	1	blue_out_a<7>	12320	pad_Gattack	48	pad_Gattack	16333
blue_out_a<6>	2	blue_out_a<6>	12286	pad_Gattackb	49	pad_Gattackb	16332
blue_out_a<5>	3	blue_out_a<5>	12112	pad_Inout	50	pad_Inout	16326
blue_out_a<4>	4	blue_out_a<4>	11150	red_out_a<9>	58	red_out_a<9>	16318
green_out_b<2>	30	green_out_b<2>	12704	red_out_a<7>	57	red_out_a<7>	16319
blue_out_a<3>	5	blue_out_a<3>	10037	red_out_a<5>	56	red_out_a<5>	16327
blue_out_a<2>	6	blue_out_a<2>	9114	red_out_a<3>	55	red_out_a<3>	16321
blue_out_a<1>	7	blue_out_a<1>	8189	red_out_a<4>	54	red_out_a<4>	16322
blue_out_a<0>	8	blue_out_a<0>	7412	red_out_a<5>	53	red_out_a<5>	16323
green_out_b<3>	29	green_out_b<3>	12776	red_out_a<6>	52	red_out_a<6>	16324
green_out_b<4>	28	green_out_b<4>	13007	red_out_a<7>	51	red_out_a<7>	16325
green_out_b<5>	27	green_out_b<5>	13841	red_out_b<2>	66	red_out_b<2>	16327
green_out_b<6>	26	green_out_b<6>	14560	red_out_b<3>	65	red_out_b<3>	16311
pad_XFILT_OUT	92	pad_XFILT_OUT	29	red_out_b<2>	64	red_out_b<2>	16312
green_out_a<7>	17	green_out_a<7>	16177	red_out_b<3>	63	red_out_b<3>	16313
pad_A0	83	pad_A0	6124	red_out_b<4>	62	red_out_b<4>	16314
pad_A1	84	pad_A1	4847	red_out_b<5>	61	red_out_b<5>	16315
pad_Bain	85	pad_Bain	12569	red_out_b<6>	60	red_out_b<6>	16316
pad_Bclampv	86	pad_Bclampv	12490	red_out_b<7>	59	red_out_b<7>	16317
pad_Bmids	33	pad_Bmids	12626	***TOKI = 108***			
pad_CKXT	78	pad_CKXT	398	... BIG SCH NODE : AGND	67	CORN = 778	
pad_CTL0	34	pad_CTL0	553	... BIG SCH NODE : ALGND	68	CORN = 420	
pad_CTL1	35	pad_CTL1	8	... BIG SCH NODE : ALND	69	CORN = 225	
pad_CTL2	36	pad_CTL2	10	... BIG SCH NODE : AUND	70	CORN = 715	
pad_CTL3_MCL	37	pad_CTL3_MCL	11	... BIG SCH NODE : BAND	71	CORN = 465	
pad_CKINV	87	pad_CKINV	9820	... BIG SCH NODE : BWD	72	CORN = 353	
pad_Cost	88	pad_Cost	553	... BIG SCH NODE : DWD	76	CORN = 157	
pad_DE	38	pad_DE	16330	... BIG SCH NODE : DVDD	68	CORN = 235	
pad_DVSL	89	pad_DVSL	26	... BIG SCH NODE : DVDS	69	CORN = 389	
pad_DVSDA	39	pad_DVSDA	25	... BIG SCH NODE : DVDD	70	CORN = 209	
pad_GClampv	90	pad_GClampv	91	... BIG SCH NODE : DVDS	71	CORN = 305	
pad_Gain	91	pad_Gain	15666	... WARNING ** UN-LABELED BIG SCH NODE = 28760	72	CORN = 338	
pad_Gmids	40	pad_Gmids	15701	... WARNING ** UN-LABELED BIG SCH NODE = 28761	73	CORN = 338	
pad_Hsync	92	pad_Hsync	15707	... WARNING ** UN-LABELED BIG SCH NODE = 28762	74	CORN = 338	
pad_MDA	41	pad_MDA	24	... WARNING ** UN-LABELED BIG SCH NODE = 28764	75	CORN = 290	
pad_Report	42	pad_Report	16494	... WARNING ** UN-LABELED BIG SCH NODE = 28765	76	CORN = 298	
pad_Rain	93	pad_Rain	16193	... WARNING ** UN-LABELED BIG SCH NODE = 28766	77	CORN = 305	
pad_Rclampv	94	pad_Rclampv	16176	... WARNING ** UN-LABELED BIG SCH NODE = 28767	78	CORN = 305	
pad_Refin	95	pad_Refin	16495	... WARNING ** UN-LABELED BIG SCH NODE = 28768	79	CORN = 305	
pad_Rndsc	43	pad_Rndsc	16488	... WARNING ** UN-LABELED BIG SCH NODE = 28769	80	CORN = 305	
pad_Rterm	96	pad_Rterm	15	... WARNING ** UN-LABELED BIG SCH NODE = 28770	81	CORN = 305	
pad_Rx0n	97	pad_Rx0n	21	... BIG LAY NODE : DVDD	13	CORN = 353	
pad_Rx0p	98	pad_Rx0p	20	... BIG LAY NODE : DVDD	14	CORN = 465	
pad_Rx1n	99	pad_Rx1n	19	... BIG LAY NODE : DVDD	28	CORN = 157	
pad_Rx1p	100	pad_Rx1p	18	... BIG LAY NODE : DVDD	48	CORN = 209	
pad_Rx2n	101	pad_Rx2n	17	... WARNING ** UN-LABELED BIG LAY NODE = 53	53	CORN = 290	

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```

DEV259652 MOS P ---- X1144-X11-X1 : DEV67648 MOS P X1144-X11-X15-U21_OUT
 8-X15-mb39 : X=081.00 Y=-1048.75
X1144-X11-X18-X15-INC_P : X1144-X11-X18-X15-INC_P
X1144-X11-X18-X15-U27_IN2 : X1144-X11-X18-X15-U27_IN2
X1144-X11-X18-X15-U12_IN2 : X1144-X11-X18-X15-U12_IN2

DEV259630 MOS N ---- X1144-X11-X1 : DEV215930 MOS N X1144-X11-X18-X15-INC_P
 8-X15-mb40 : X=081.25 Y=-1043.75
X1144-X11-X18-X15-U27_IN2 : X1144-X11-X18-X15-U27_IN2
X1144-X11-X18-X15-U12_IN2 : X1144-X11-X18-X15-U12_IN2

OCCURRENCE NAME X1144-X11-X18-X15-U21_OUT : ***** UN-MATCHED *****
?DEV296382 NAND : ***** UN-MATCHED *****
X1144-X11-X18-X15-U21_OUT,
X1144-X11-X18-X15-U27_CO,
X1144-X11-X18-X15-U27_IN2

OCCURRENCE NAME X1144-X11-X18-X15-U21_OUT : ***** UN-MATCHED *****
?DEV296383 INV : ***** UN-MATCHED *****
X1144-X11-X18-X15-U27_IN2,
X1144-X11-X18-X15-U30_IN

OCCURRENCE NAME X1144-X11-X18-X15-U28_IN2 : ***** UN-MATCHED *****
DEV308798 NOR : ***** UN-MATCHED *****
: X=1058.40 Y=-1043.10
X1144-X11-X18-X15-U28_IN2,
X1144-X11-X18-X15-U27_IN2,
X1144-X11-X18-X14_CO

OCCURRENCE NAME X1144-X11-X18-X15_UON : ***** UN-MATCHED *****
DEV311138 INV : ***** UN-MATCHED *****
: X=092.15 Y=-1043.10
X1144-X11-X18-X15_QN,
X1144-X11-X18-X15-U27_IN2

***** UN-MATCHED ***** : ***** UN-MATCHED *****
: ?DEV294766 SDW : X=1054.30 Y=-1043.10
X1144-X11-X18-X14_CO
X1144-X11-X18-X15-U21_OUT,
X1144-X11-X18-X14_CO,
X1144-X11-X18-X15-U27_IN2

***** UN-MATCHED ***** : ***** UN-MATCHED *****
: ?DEV318913 RUP : X=1054.40 Y=-1048.70
X1144-X11-X18-X14_CO,
X1144-X11-X18-X15-U27_IN2

***** UN-MATCHED ***** : ***** UN-MATCHED *****
: DEV354687 INV : X=109.15 Y=-1043.10
X1144-X11-X18-X15_QN,
X1144-X11-X18-X15-U27_IN2

***** UN-MATCHED ***** : ***** UN-MATCHED *****
: ?DEV294766 SDW : X=1054.30 Y=-1043.10
X1144-X11-X18-X14_CO
X1144-X11-X18-X15-U21_OUT,
X1144-X11-X18-X15-U27_IN2

***** UN-MATCHED ***** : ***** UN-MATCHED *****
: ?DEV318913 RUP : X=1054.40 Y=-1048.70
X1144-X11-X18-X14_CO,
X1144-X11-X18-X15-U27_IN2

***** UN-MATCHED ***** : ***** UN-MATCHED *****
: DEV333003 NOR : X=1058.40 Y=-1043.10
X1144-X11-X18-X15-U28_IN2,
X1144-X11-X18-X15-U27_IN2,
X1144-X11-X18-X14_CO

OCCURRENCE NAME X1144-X11-X18-X15_QN : ***** UN-MATCHED *****
DEV296585 INV : ***** UN-MATCHED *****
: X=1130.50 Y=-1042.75
X1144-X11-X18-X14-U27_IN2,
X1144-X11-X18-X14-U30_IN

OCCURRENCE NAME X1144-X11-X18-X14-U28_IN2 : ***** UN-MATCHED *****
DEV308801 NOR : ***** UN-MATCHED *****
: X=1101.80 Y=-1043.10
X1144-X11-X18-X14-U28_IN2,
X1144-X11-X18-X14-U27_IN2,
X1144-X11-X18-X14_CO

OCCURRENCE NAME X1144-X11-X18-X14_QN : ***** UN-MATCHED *****
DEV311140 INV : ***** UN-MATCHED *****
: X=1135.55 Y=-1043.10
X1144-X11-X18-X14_QN,
X1144-X11-X18-X14-U27_IN2

***** UN-MATCHED ***** : ***** UN-MATCHED *****
: ?DEV294767 SDW : X=1097.70 Y=-1043.10
X1144-X11-X18-X14-U27_IN2,
X1144-X11-X18-X14_CO,
X1144-X11-X18-X14-U27_IN2

***** UN-MATCHED ***** : ***** UN-MATCHED *****
: ?DEV318914 RUP : X=1097.80 Y=-1048.70
X1144-X11-X18-X14-U27_IN2,
X1144-X11-X18-X14_CO,
X1144-X11-X18-X15_QN,
X1144-X11-X18-X15_CO,
X1144-X11-X18-X15-U27_IN2

***** UN-MATCHED ***** : ***** UN-MATCHED *****
: DEV362707 INV : X=1052.90 Y=-1043.10
X1144-X11-X18-X15_CO,

```

```

***** UN-MATCHED ***** : ***** UN-MATCHED *****
: ?DEV294766 SDW : X=1054.30 Y=-1043.10
X1144-X11-X18-X14_U27_IN2,
X1144-X11-X18-X14_CO,
X1144-X11-X18-X15_U27_IN2

***** UN-MATCHED ***** : ***** UN-MATCHED *****
: ?DEV294767 SDW : X=1097.70 Y=-1043.10
X1144-X11-X18-X14_U27_IN2,
X1144-X11-X18-X14_CO,
X1144-X11-X18-X14_U27_IN2

***** UN-MATCHED ***** : ***** UN-MATCHED *****
: ?DEV318914 RUP : X=1097.80 Y=-1048.70
X1144-X11-X18-X14_U27_IN2,
X1144-X11-X18-X14_CO,
X1144-X11-X18-X15_QN,
X1144-X11-X18-X15_CO,
X1144-X11-X18-X15_U27_IN2

***** UN-MATCHED ***** : ***** UN-MATCHED *****
: DEV354689 INV : X=1135.55 Y=-1043.10
X1144-X11-X18-X14_QN,
X1144-X11-X18-X14-U27_IN2

***** UN-MATCHED ***** : ***** UN-MATCHED *****
: ?DEV294767 SDW : X=1097.70 Y=-1043.10
X1144-X11-X18-X14-U27_IN2,
X1144-X11-X18-X14_CO,
X1144-X11-X18-X14-U27_IN2

***** UN-MATCHED ***** : ***** UN-MATCHED *****
: ?DEV318914 RUP : X=1097.80 Y=-1048.70
X1144-X11-X18-X14-U27_IN2,
X1144-X11-X18-X14_CO,
X1144-X11-X18-X15_QN,
X1144-X11-X18-X15_CO,
X1144-X11-X18-X15_U27_IN2

***** UN-MATCHED ***** : ***** UN-MATCHED *****
: DEV362707 INV : X=1052.90 Y=-1043.10
X1144-X11-X18-X15_CO,

```

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Exhibit 5

EXHIBIT 3
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```

: X=1797.95 Y=-1459.80
: X1144-X11-X10-X127-X10-i4_CO,10
: X1144-X11-X10-X11-X127-X10-X15-U21_OUT
: T, ?58949 W = 1.20 L = .35
: ?DEV179202 MOS N
: X=1797.10 Y=-1459.80
: X1144-X11-X10-X11-X127-X10-i0_ZN
2, ALGND, ?589849
: W = 1.20 L = .35
: ?DEV294754 SDN
: X=1771.80 Y=-1434.80
: X1144-X11-X10-X11-X127-X10-X1402-U21_
OUT, X1144-X11-X10-X11-X127-X10-X10-X10-U2
: X1144-X11-X10-X11-X127-X10-X10-X10-U2
7_IN2
: ?DEV181504 MOS N
: X=1772.75 Y=-1434.80
: X1144-X11-X10-X11-X127-X10-i0_ZN
: X1144-X11-X10-X11-X127-X10-X1402-U21_
OUT, ?589994
: W = 1.20 L = .35
: ?DEV181503 MOS N
: X=1771.90 Y=-1434.80
: X1144-X11-X10-X11-X127-X10-X1402-U27_
IN2, ALGND, ?589994
: W = 1.20 L = .35
: ?DEV294765 SDN
: X=1047.30 Y=-1068.10
: X1144-X11-X10-X17-U21_OUT,
: X1144-X11-X18-i6_CO,
: X1144-X11-X11-X11-X17-U21_IN2
: ?DEV213945 MOS N
: X=1048.15 Y=-1068.10
: X1144-X11-X18-X17-U21_OUT, ?593222
: W = 1.20 L = .35
: ?DEV213944 MOS N
: X=1047.30 Y=-1068.10
: X1144-X11-X18-X17-U21_IN2, DGND,
: ?593222
: W = 1.20 L = .35
: ?DEV294766 SDN
: X=1054.30 Y=-1043.10
: X1144-X11-X18-X18-i4_CO,
: X1144-X11-X18-i5_U21_OUT,
: ?DEV215948 MOS N
: X=1055.15 Y=-1043.10
: X1144-X11-X18-i4_CO,
: X1144-X11-X18-X15-U21_OUT, ?593433
: W = 1.20 L = .35
: ?DEV294767 SDN
: X=1054.30 Y=-1043.10
: X1144-X11-X18-X15-U21_IN2, DGND,
: ?593433
: W = 1.20 L = .35
: ?DEV294767 SDN
: X=1057.70 Y=-1043.10
: X1144-X11-X18-X14-U21_OUT,

```

```

: X1144-X11-X18-i3_CO,
: X1144-X11-X18-X14_U27_IN2
: ?DEV215960 MOS N
: X=1098.55 Y=-1043.10
: X1144-X11-X18-i3_CO,
: X1144-X11-X18-X14-U21_OUT, ?593435
: ?DEV215939 MOS N
: X=1097.70 Y=-1043.10
: X1144-X11-X18-X14_U27_IN2, DGND,
: ?593435
: W = 1.20 L = .35
: ?DEV215943 PUP
: X=1097.20 Y=-1465.40
: ?DEV215943 PUP, Y=-1465.40
: X=1097.20
: ?36196,
: X1144-X11-X10-X11-X127-X10-X15-U27_IN2
2, ALVDD, ?36196
: X1144-X11-X10-X11-X127-X10-X15-U27_IN2
: ALVDD, ?36196
: W = 3.00 L = .35
: ?DEV21658 MOS P
: X=1797.20 Y=-1465.40
: ?DEV21659 MOS P
: X=1798.55 Y=-1465.40
: X1144-X11-X10-X11-X127-X10-X15-U27_IN2
2, ALVDD, ?36196
: X1144-X11-X10-X11-X127-X10-X15-U27_IN2
: ALVDD, ?36196
: W = 3.00 L = .35
: ?DEV218374 PUP
: X=1772.00 Y=-1440.40
: ?37481,
: X1144-X11-X10-X11-X127-X10-X15-U27_IN2
: X1144-X11-X10-X11-X127-X10-X15-U27_IN2
: ALVDD, ?37481
: W = 3.00 L = .35
: ?DEV2183980 MOS P
: X=1772.00 Y=-1440.40
: X1144-X11-X10-X11-X127-X10-X15-U27_IN2
: ALVDD, ?37481
: W = 3.00 L = .35
: ?DEV218394 PUP
: X=1047.40 Y=-1073.70
: ?593765, X1144-X11-X18-i6_CO,
: X1144-X11-X18-X17-U27_IN2
: ?DEV215596 MOS P
: X=1048.75 Y=-1073.70
: X1144-X11-X18-i6_CO, DVDD, ?593765
: W = 3.00 L = .35
: ?DEV215595 MOS P
: X=1047.40 Y=-1073.70
: X1144-X11-X18-X17-U27_IN2, DVDD,
: ?593765
: W = 3.00 L = .35
: ?DEV218913 PUP
: X=1054.40 Y=-1048.70
: ?593948, X1144-X11-X18-i4_CO,

```

```

X144-X11-X18-X15-U27_IN2 : X=-944.85   Y=-162.65
: ?DEV67651  MOS  P : ?94441   ?CPAPPS
: X=1055.75   Y=-1048.70 : ?DEV5   ?CPAPPS
: X144-X11-X18-X14_CO, DVDD, ?55946 : X=-931.30   Y=-162.65
: W = 3. 00   L = .35 : ?94442   ?CPAPPS
: ?DEV67650  MOS  P : ?DEV76   ?CPAPPS
: X=1054.40   Y=-1048.70 : X=-917.75   Y=-162.65
: X144-X11-X18-X15-U27_IN2, DVDD, ?55948 : ?94843   ?CPAPPS
: W = 3. 00   L = .35 : ?DEV81   ?CPAPPS
: ?DEV718914  PUP : X=-927.75   Y=-148.10
: X=1097.80   Y=-1048.70 : ?94844   ?CPAPPS
: ?55949, X144-X11-X18-X13_CO, : ?DEV76   ?CPAPPS
: X144-X11-X18-X14-U27_IN2 : X=-906.35   Y=-148.10
: ?DEV67653  MOS  P : ?94845   ?CPAPPS
: X=1099.15   Y=-1048.70 : ?DEV83   ?CPAPPS
: X144-X11-X18-X13_CO, DVDD, ?55949 : X=-884.95   Y=-148.10
: W = 3. 00   L = .35 : ?94846   ?CPAPPS
: ?DEV67652  MOS  P : X=105.55   Y=-148.10
: X=1097.80   Y=-1048.70 : ?94847   ?CPAPPS
: ?55949 : X=-86.05   Y=-148.10
: W = 3. 00   L = .35 : ?94848   ?CPAPPS
: ?DEV662   ?CPAPPS : X=62.55   Y=-148.10
: X=427.75   Y=-162.80 : ?94849   ?CPAPPS
: ?94829   ?CPAPPS : ?DEV5   ?CPAPPS
: ?DEV63   ?CPAPPS : X=-84.05   Y=-148.10
: X=406.35   Y=-162.80 : ?94850   ?CPAPPS
: ?94830   ?CPAPPS : ?DEV5   ?CPAPPS
: ?DEV64   ?CPAPPS : X=62.55   Y=-148.10
: X=349.95   Y=-162.80 : ?94851   ?CPAPPS
: ?94831   ?CPAPPS : ?DEV67   ?CPAPPS
: ?DEV65   ?CPAPPS : X=-81.05   Y=-148.10
: X=-1392.00   Y=-162.70 : ?94852   ?CPAPPS
: ?94832   ?CPAPPS : ?DEV78   ?CPAPPS
: X=-139.95   Y=-162.80 : X=1392.00   Y=-148.00
: ?DEV66   ?CPAPPS : ?94853   ?CPAPPS
: X=-1382.30   Y=-162.70 : ?DEV89   ?CPAPPS
: ?94833   ?CPAPPS : X=1382.30   Y=-148.00
: ?DEV67   ?CPAPPS : ?94854   ?CPAPPS
: X=-1372.60   Y=-162.70 : ?DEV90   ?CPAPPS
: ?94834   ?CPAPPS : X=1372.60   Y=-148.00
: ?DEV68   ?CPAPPS : ?94855   ?CPAPPS
: X=-1166.45   Y=-162.70 : ?DEV91   ?CPAPPS
: ?94835   ?CPAPPS : X=1166.45   Y=-148.00
: X=-1166.45   Y=-162.70 : ?94856   ?CPAPPS
: ?DEV70   ?CPAPPS : ?DEV92   ?CPAPPS
: X=-1144.95   Y=-162.70 : X=1155.70   Y=-148.00
: ?94837   ?CPAPPS : ?94855   ?CPAPPS
: ?DEV71   ?CPAPPS : ?DEV93   ?CPAPPS
: X=-1155.70   Y=-162.70 : X=-1144.95   Y=-148.00
: ?94836   ?CPAPPS : ?94856   ?CPAPPS
: ?DEV70   ?CPAPPS : ?DEV94   ?CPAPPS
: X=-1144.95   Y=-162.70 : X=661.25   Y=-148.00
: ?94837   ?CPAPPS : ?94857   ?CPAPPS
: ?DEV71   ?CPAPPS : ?DEV95   ?CPAPPS
: X=-695.85   Y=-162.70 : X=-676.55   Y=-148.00
: ?94838   ?CPAPPS : ?94858   ?CPAPPS
: ?DEV72   ?CPAPPS : ?DEV96   ?CPAPPS
: X=-678.55   Y=-162.70 : X=661.25   Y=-148.00
: ?94839   ?CPAPPS : ?94859   ?CPAPPS
: ?DEV73   ?CPAPPS : ?DEV97   ?CPAPPS
: X=-661.25   Y=-162.70 : X=944.85   Y=-147.95
: ?94840   ?CPAPPS : ?94860   ?CPAPPS
: ?DEV74   ?CPAPPS : ?DEV98   ?CPAPPS

```

```

:
: X=-931.30   Y=-147.95
: ?9461      ?CAPPSS
: ?DEV199    ?CAPPSS
: X=-917.75   Y=-147.95
:
: ?94862      ?CAPPSS
: ?DEV104    ?CAPPSS
: X=-427.75   Y=-133.40
:
: ?94863      ?CAPPSS
: ?DEV106    ?CAPPSS
: X=-384.95   Y=-133.40
:
: ?94864      ?CAPPSS
: ?DEV107    ?CAPPSS
: X=-105.55   Y=-133.40
:
: ?94865      ?CAPPSS
: ?DEV110    ?CAPPSS
: X=-41.05    Y=-133.40
:
: ?94866      ?CAPPSS
: ?DEV111    ?CAPPSS
: X=-1392.00  Y=-133.30
:
: ?94867      ?CAPPSS
: ?DEV113    ?CAPPSS
: X=-1372.60   Y=-133.30
:
: ?94868      ?CAPPSS
: ?DEV114    ?CAPPSS
: X=-1166.45   Y=-133.30
:
: ?94869      ?CAPPSS
: ?DEV116    ?CAPPSS
: X=-1144.95   Y=-133.30
:
: ?94870      ?CAPPSS
: ?DEV117    ?CAPPSS
: X=-695.85    Y=-133.30
:
: ?94871      ?CAPPSS
: ?DEV119    ?CAPPSS
: X=-661.25    Y=-133.30
:
: ?94872      ?CAPPSS
: ?DEV120    ?CAPPSS
: X=-944.85    Y=-133.25
:
: ?94873      ?CAPPSS
: ?DEV122    ?CAPPSS
: X=-917.75   Y=-133.25
:
: ?94874      ?CAPPSS
: ?DEV123    ?CAPPSS
: X=-427.75   Y=-118.70
:
: ?94875      ?CAPPSS
: ?DEV125    ?CAPPSS
: X=-384.95   Y=-118.70
:
: ?94876      ?CAPPSS
: ?DEV126    ?CAPPSS
: X=-105.55   Y=-118.70
:
: ?94877      ?CAPPSS
: ?DEV129    ?CAPPSS
: X=-41.05    Y=-118.70
:
: ?94878      ?CAPPSS
: ?DEV130    ?CAPPSS
: X=-1392.00  Y=-118.60
:
: ?94879      ?CAPPSS
: ?DEV132    ?CAPPSS
: X=-1372.60   Y=-118.60
:
: ?94880      ?CAPPSS
: ?DEV133    ?CAPPSS
:

```

THE REST OF UN-MATCHED LAYOUT DEVICES ARE NOT LISTED

LMS SUMMARY (REPEATED)

```

:
: X=-1166.45   Y=-118.60
: ?94881      ?CAPPSS
: ?DEV135    ?CAPPSS
: X=-1144.95   Y=-118.60
:
: ?94882      ?CAPPSS
: ?DEV136    ?CAPPSS
: X=-695.85    Y=-118.60
:
: ?94883      ?CAPPSS
: ?DEV138    ?CAPPSS
: X=-661.25   Y=-118.60
:
: ?94884      ?CAPPSS
: ?DEV139    ?CAPPSS
: X=-944.85   Y=-118.55
:
: ?94885      ?CAPPSS
: ?DEV141    ?CAPPSS
: X=-917.75   Y=-118.55
:
: ?94886      ?CAPPSS
: ?DEV142    ?CAPPSS
: X=-427.75   Y=-118.55
:
: ?94887      ?CAPPSS
: ?DEV144    ?CAPPSS
: X=-384.95   Y=-118.55
:
: ?94888      ?CAPPSS
: ?DEV145    ?CAPPSS
: X=-105.55   Y=-118.55
:
: ?94889      ?CAPPSS
: ?DEV146    ?CAPPSS
: X=-41.05    Y=-118.55
:
: ?94890      ?CAPPSS
: ?DEV147    ?CAPPSS
: X=-105.55   Y=-118.55
:
: ?94891      ?CAPPSS
: ?DEV148    ?CAPPSS
: X=-1372.60   Y=-104.00
:
: ?94892      ?CAPPSS
: ?DEV149    ?CAPPSS
: X=-1392.00  Y=-104.00
:
: ?94893      ?CAPPSS
: ?DEV151    ?CAPPSS
: X=-1372.60   Y=-104.00
:
: ?94894      ?CAPPSS
: ?DEV152    ?CAPPSS
: X=-1166.45   Y=-104.00
:
: ?94895      ?CAPPSS
: ?DEV154    ?CAPPSS
: X=-1144.95   Y=-104.00
:
: ?94896      ?CAPPSS
: ?DEV155    ?CAPPSS
: X=-695.85    Y=-104.00
:
: ?94897      ?CAPPSS
: ?DEV157    ?CAPPSS
: X=-661.25   Y=-104.00
:
: ?94898      ?CAPPSS
: ?DEV158    ?CAPPSS
: X=-944.85   Y=-104.00
:

```

***** LVS DEVICE MATCH SUMMARY *****

NUMBER OF UN-MATCHED SCHEMATICS	DEVICES	=	5
NUMBER OF UN-MATCHED LAYOUT	DEVICES	=	359
NUMBER OF MATCHED SCHEMATICS	DEVICES	=	136208
NUMBER OF MATCHED LAYOUT	DEVICES	=	136208

***** DISCREPANCY POINTS SUMMARY *****

15 MATCHED NODE TO UN-MATCHED LAYOUT AND SCHEMATIC DEVICES

***** DEVICE MATCHING SUMMARY BY TYPE *****

TYPE	SUB-TYPE	TOTAL DEVICE		UN-MATCHED DEVICE	
		SCH.	LAY.	SCH.	LAY.
MOS	P	122675	122676	10	11
MOS	N	123029	123029	10	10
BUT	SP	168	168	0	0
RES	P	247	247	0	0
RES	M1	1	1	0	0
RES	N	403	403	0	0
RES	M3	6	6	0	0
RES	NN	9	9	0	0
RES	P1	12	12	0	0
RES	P2	4	4	0	0
RES	B1	24	24	0	0
DIO	ND	96	96	0	0
CAP	N	21	21	0	0
CAP	PW	32	32	0	0
CAP	PS	170	170	0	0

***** /W* - SCHEMATIC AND LAYOUT MAY NOT MATCH
 ** CHECK ALL ABOVE DISCREPANCY
 ** AND WARNING MESSAGES

Statistics Of Layers

Layer #	Rectangies	Polygons	Paths	Ellipses	Labels	Nodes
0	10	1	13	0	247	0
1	7351	140	12	0	0	0
2	7889	461	12	0	0	0
4	6546	1693	40	0	0	0
5	10831	499	5	0	0	0
7	147304	0	3	0	0	0
8	31753	2388	11513	0	0	0
9	140836	0	2	0	0	0
10	7280	228	98420	1	0	0
11	1	0	1	0	0	0
12	77	13	0	0	0	0
13	2	0	0	0	0	0
14	123135	0	3	0	0	0
15	1158	113	53811	1	0	0
19	11	0	0	0	0	0
21	0	0	0	0	2455	0
22	0	0	0	0	2413	0
24	0	0	0	0	1945	0
25	134	2	0	0	0	0
33	147	23	0	1	0	0
38	50739	15317	0	0	0	0
40	3448	1354	0	0	0	0
43	6633	86	0	0	0	0
44	3448	1354	0	0	0	0
56	244	0	0	0	0	0
57	15788	2500	0	0	0	0
58	15549	2585	1	0	0	0
59	137044	57314	1	0	0	0
63	9	2	52	0	7775	0
64	154	87	0	0	0	0
235	9	6	0	0	0	0

LVS

LVS.
LVSS
DRC
DRCFP
MDRC
ERC
ESDLAT
GBCHK
OPSHRTS
DIVSS
DRC
DRCF
ALIDRC
ANTENNA
XOR1
XOR2
GENLYR
LPEI
LPEIG
LPEIGSD
LPEC
PNCHK
PNCHKFP.
PNLVS.

LVS with Stamps.
Drc's only Standard Pitch Pads
Drc's only Fine Pitch Pads
Manufacturing arcs.
ERC (Ercs only)
Esd and Latchup checks.
Latchup Guardband/manufacturing checks.
OPSHRTS (Cpens/Shorts only)
DRC's and LVS with Stamps.
DRC and ERC
Drc's with gen.layers output.
All Drc's for OA.

Antenna checks.
Xor of the layers in $\langle 140_drcm_strm \rangle$ file.
 $\langle 140_drcm_strm \rangle$ file A > to $\langle 140_drcm_strm \rangle$ file B
Generate current layer only.
LPE. (Parasitic cap only) lumped to Gnd.
Drc's on $\langle 140_drcm_strm \rangle$ layers.
Drc's (fine pitch) on gen.layers.
Drc's on $\langle 140_drcm_strm \rangle$ layers.

input job type = [genlyr]

X -2780 X 2780
Y -2565 Y 2565
9887A

7443 4560 size file

nonact
seal-ring

Job Parameters

- (0) System [C:\SCSI]
- (1) Master Subblock <schematic> [MESSAGE 1]
- (2) Cdl Filename [5887A.CCDL]
- (3) Primary Structure [5887A]
- (4) Stream file name [5887A.GEN]
- (5) Output Stream file name [5887A.GEN]
- (6) Power Nodes [AVOIDING DVDD OVDD PWD]
- (7) Ground Nodes [AVOIDING DVDD OVDD PWD]
- (8) Keep Temporary data <YES/NO/SMART> [YES]
- (9) Device Size Checking [YES]
- (10) Optional extra parameters
- (11) Save Project file
- (12) Help
- (13) Abort program
- (14) Exit

Enter number <0-14>:-